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OF THE

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CONTENTS OF VOLUME 1.

(This volume is bound in two parts.)

1. Report of the Auditor General for the year ended 31st March, 1909. Volume I, Parts A, C to J (inclusive) L, M, N; Volume III, Parts V, W, X, Y. Presented 12th November, 1909, by Hon. W. S. Fielding. Volume II, Ports B, K and O to U, (inclusive), presented 12th January, 1910, by Hon. W. S. Fielding.

Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 2.

2. Public Accounts of Canada, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. W. S. Fielding.

Printed for both distribution and sessional papers.

3. Estimates of the sums required for the services of Canada for the year ending on the 31st March, 1911. Presented 18th November, 1909, by Hon. W. S. Fielding.

Printed for both distribution and sessional papers.

4. Supplementary Estimates of sums required for the service of Canada, for the fiscal year ending 31st March, 1910. Presented 24th November, 1909, by Hon. W. S. Fielding.

Printed for both distribution and sessional papers.

5. Further Supplementary Estimates of sums required for the service of Canada, for the fiscal year ending 31st March, 1910. Presented 14th March, 1910, by Hon W. S. Fielding.

Printed for both distribution and sessional papers.

5*a*. Supplementary Estimates of sums required for the service of Canada for the fiscal year ending 31st March, 1911. Presented 3rd February, 1910, by Hon. W. S. Fielding.

Printed for both distribution and sessional papers.

5*b*. Further Supplementary Estimates of the sums required for the service of Canada, for the fiscal year ending 31st March, 1911. Presented 30th April, 1910, by Hon. W. S. Fielding.

Printed for both distribution and sessional papers.

5*c*. Further Supplementary Estimates of the sums required for the service of Canada, for the fiscal year ending 31st March, 1910. Presented 20th April, 1910, by Hon. W. S. Fielding.

Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 2—*Continued.*

6. List of Shareholders in the Chartered Banks of Canada, as on the 31st December, 1909. Presented 21st March, 1910, by Sir Wilfrid Laurier.

Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 3.

7. Report of dividends remaining unpaid, unclaimed balances and unpaid drafts and bills of exchange in Chartered Banks of Canada, for five years and upwards, prior to 31st December, 1909.

Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 4.

8. Report of the Superintendent of Insurance for the year ended 31st December, 1909.

Printed for both distribution and sessional papers.

9. Abstract of Statements of Insurance Companies in Canada, for the year ended 31st December, 1909.

Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 5.

10. Report of the Department of Trade and Commerce, for the fiscal year ended 31st March, 1909. Part I.—Canadian Trade. Presented 12th November, 1909, by Hon. W. S. Fielding.. .. ..*Printed for both distribution and sessional papers.*

10*a*. Report of the Department of Trade and Commerce. Part II.—Canadian Trade with France, Germany, United Kingdom and United States. Presented 12th November, 1909, by Hon. W. S. Fielding.. .. .. ..*Printed for both distribution and sessional papers.*

10*b*. Report of the Department of Trade and Commerce for the fiscal year ended 31st March, 1909. Part III.—Canadian Trade with foreign countries except France, Germany, United Kingdom and United States. Presented 29th November, 1909, by Sir Wilfrid Laurier.. .. ..*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 6.

10*c*. Report of the Department of Trade and Commerce for the fiscal year ended 31st March, 1909. Part IV.—Canadian Trade: Miscellaneous. Presented 12th November, 1909, by Hon. W. S. Fielding.. .. ..*Printed for both distribution and sessional papers.*

10*d*. Report of the Department of Trade and Commerce for the fiscal year ended 31st March, 1909. Part V.—Grain Statistics, including the crop year ended 31st August, 1909, and season of navigation ended 10th December, 1909. Presented 18th March, 1910, by Hon. W. S. Fielding.. .. ..*Printed for both distribution and sessional papers.*

10*e*. Report of the Department of Trade and Commerce for the fiscal year ended 31st March, 1909. Part VI.—Subsidized Steamship Services, with statistics showing steamship traffic to 31st December, 1909, and estimates for fiscal year 1910-1911. Presented 3rd May, 1910, by Sir Wilfrid Laurier..*Printed for both distribution and sessional papers.*

10*f*. Report of the Department of Trade and Commerce for the fiscal year ended 31st March, 1909. Part VII.—Trade of Foreign Countries and Treaties and Conventions. Presented 25th April, 1910, by Sir Wilfrid Laurier.

Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 6—*Continued.*

10*g*. Certified copy of a Report of the Committee of the Privy Council, approved by His Excellency the Governor General on the 14th February, 1910, in respect to trade relations with Germany. Presented 15th February, 1910, by Hon. W. S. Fielding.
Printed for sessional papers.

10*h*. Trade relations with Germaney.—No. 2. Presented 2nd March, 1910, by Hon. W. S. Fielding.. .. .. .

CONTENTS OF VOLUME 10.

19. Report of the Minister of Public Works, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. W. Pugsley.
Printed for both distribution and sessional papers.

19*a*. (No issue.)

19*b*. (No issue.)

19*c*. Supplementary Report of the International Waterways Commission, 1909. Presented 19th November, 1909, by Hon. W. Pugsley.
Printed for both distribution and sessional papers.

19*d*. Report of the International Waterways Commission on proposed dam and regulation work at foot of Lake Erie, and appendices accompanying said report. Presented 17th February, 1910, by Hon. W. Pugsley.. .. ..*Not printed.*

19*e*. Additional correspondence, International Waterways Treaty, and Report on division of Waters of St. Mary and Milk River. Presented 4th April, 1910, by Sir Wilfrid Laurier.
Printed for both distribution and sessional papers.

20. Report of the Department of Railways and Canals, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. G. P. Graham.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 11.

20*a*. Canal Statistics for the season of navigation, 1909. Presented 21st March, 1910, by Hon. G. P. Graham.. .. ..*Printed for both distribution and sessional papers.*

20*b*. Railway Statistics of Canada, for the year ended 30th June, 1909. Presented 12th January, 1010, by Hon. G. P. Graham.
Printed for both distribution and sessional papers.

20*c*. Fourth Report of the Board of Railway Commissioners for Canada, to 31st March, 1908, for the year ending 31st March, 1909. Presented 12th November, 1909, by Hon. G. P. Graham.. .. ..*Printed for both distribution and sessional papers.*

20*d*. Report of the Hudson Bay Railway Surveys. Presented 13th December, 1909, by Hon. G. P. Graham.. .. ..*Printed for both distribution and sessional papers.*

21. Report of the Department of Marine and Fisheries (Marine) for 1908. Presented 15th November, 1909, by Hon. L. P. Brodeur.
Printed for both distribution and sessional papers.

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21*a*. Eighth Report of the Geographic Board of Canada, containing all decisions to June 30, 1909. Presented 25th November, 1909, by Hon. L. P. Brodeur.
Printed for both distribution and sessional papers.

21*b*. List of Shipping issued by the Department of Marine and Fisheries, being a list of vessels on the registry books of Canada on the 31st December, 1909.
Printed for both distribution and sessional papers.

22. Report of the Department of Marine and Fisheries (Fisheries) for 1909. Presented 12th November, 1909, by Hon. S. A. Fisher.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 13.

22*a*. Lobster Fishery. Evidence taken before Commander William Wakeham, M.D., (Officer in charge of the Gulf Fisheries Division) in Quebec and the Maritime Provinces. Two volumes. Presented 11th March, 1910, by Hon. W. Templeman. Also copy of the Report of Commander Wakeham in relation thereto.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 14.

23. Report of the Harbour Commissioners, &c., to 31st December, 1908. Presented 13th January, 1910, by Hon. R. Lemieux..*Printed for both distribution and sessional papers.*

23*a*. Report of the Chairman of the Board of Steamboat Inspection, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. S. A. Fisher.
Printed for both distribution and sessional papers.

24. Report of the Postmaster General, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Sir Wilfrid Laurier.
Printed for both distribution and sessional papers.

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25. Report of the Department of the Interior, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. F. Oliver.
Printed for both distribution and sessional papers.

25*a*. Report of the Chief Astronomer.
Printed for both distribution and sessional papers.

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25*b*. Annual Report of the Topographical Surveys Branch.
Printed for both distribution and sessional papers.

25*c*. Report of the High Commissioner for Canada, for the year ended 31st March, 1909. Presented 12th November, 1909, by. Hon. F. Oliver.
Printed for both distribution and sessional papers.

26. Summary Report of the Geological Survey Branch of the Department of Mines, for the calendar year 1909.
Printed for both distribution and sessional papers.

26*a*. Summary Report of the Mines Branch of the Department of Mines.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 17.

27. Report of the Department of Indian Affairs, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. F. Oliver.
Printed for both distribution and sessional papers.

28. Report of the Royal Northwest Mounted Police, 1909. Presented 12th January, 1910, by Sir Wilfrid Laurier.. .. ..*Printed for both distribution and sessional papers.*

CONTENTS OF VOLUME 18.

29. Report of the Secretary of State of Canada for the year ended March 31, 1909. Presented 25th November, 1909, by Hon. C. Murphy.
Printed for both distribution and sessional papers.

29*a*. Report of the Imperial Conference with representatives of the self-governing Dominions on the Naval and Military Defence of the Empire, 1909. Presented 17th November, 1909, by Sir Frederick Borden. Also with additional papers relating to Australia and New Zealand, presented 10th December, 1909, by Hon. L. P. Brodeur.
Printed for both distribution and sessional papers.

29*b*. Report of the Department of External Affairs, 1909.
Printed for both distribution and sessional papers.

30. Civil Service List of Canada, 1909. Presented 12th January, 1910, by Hon. C. Murphy.
Printed for both distribution and sessional papers.

31. First Annual Report of the Civil Service Commission of Canada, for the period from September 1st, 1908, to August 31, 1909. Presented 10th December, 1909, by Hon. C. Murphy.
Printed for both distribution and sessional papers.

32. Annual Report of the Department of Public Printing and Stationery, for the fiscal year ended 31st March, 1909. Presented 18th April, 1910, by Hon. C. Murphy.
Printed for both distribution and sessional papers.

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33. Report of the Joint Librarians of Parliament for the year 1908-9. Presented 11th November, 1909, by the Hon. the Speaker.. .. ..*Printed for sessional papers.*

34. Report of the Minister of Justice as to Penitentiaries of Canada, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. A. B. Aylesworth.
Printed for both distribution and sessional papers.

35. Report of the Militia Council, for the fiscal year ended 31st March, 1909. Presented 1st December, 1909, by Sir Frederick Borden.
Printed for both distribution and sessional papers.

35*a*. Interim Report of the Militia Council for the Dominion of Canada on the Training of the Militia during the season of 1909. Presented 25th April, 1910, by Sir Frederick Borden.. .. .. *Printed for distribution.*

36. Report of the Department of Labour, for the fiscal year ended 31st March, 1909. Presented 12th March, 1909, by Hon. L. M. King.
Printed for both distribution and sessional papers.

36*a*. Report of the Deputy Minister of Labour on industrial conditions in the Coal Fields of Nova Scotia. Presented 25th November, 1909, by Hon. L. M. King.
Printed for both distribution and sessional papers.

37. Fifth Report of the Commissioners of the Transcontinental Railway, for the year ended 31st March, 1909. Presented 12th November, 1909, by Hon. G. P. Graham.
Printed for both distribution and sessional papers.

38. Statement of Governor General's Warrants issued since the last session of parliament on account of the fiscal year 1909-10. Presented 15th November, 1909, by Hon. W. S. Fielding.. .. ..*Not printed.*

CONTENTS OF VOLUME 19—*Continued.*

39. Statement in pursuance of section 17 of the Civil Service Insurance Act, for the year ended 31st March, 1909. Presented 16th November, 1909, by Hon. W. S. Fielding. *Not printed.*

40. Statement of expenditure on account of miscellaneous unforeseen expenses, from the 1st April, 1909, to the 10th November, 1909, in accordance with the Appropriation Act of 1909. Presented 16th Novewber, 1909, by Hon. W. S. Fielding.. .. .. ..*Not printed.*

41. Statement of superannuation and retiring allowances in the Civil Service during the year ended 31st December, 1909, showing name, rank, salary, service, allowance and cause of retirement of each person superannuated or retired, also whether vacancy filled by promotion or by new appointment, and salary of any new appointee. Presented 16th November, 1909, by Hon. W. S. Fielding.. .. ..*Not printed.*

42. Return of constables employed on the Transcontinental Railway, as required under the provisions of section 6, chapter 92, of the Revised Statutes of Canada. Presented 19th November, by Hon. A. B. Aylesworth.. .. ..*Not printed.*

42*a*. Return to an order of the House of Commons, dated 16th November, 1909, for a copy of all reports, letters, communications and documents touching or relating to the resignation of Hugh D. Lumsden from his position as Chief Engineer of the National Transcontinental Railway, including a copy of all letters, communications or reports of the said Hugh D. Lumsden to the Prime Minister, touching or relating to his resignation, or to the affairs of the National Transcontinental Railway. Presented 23rd November, 1909.—*Mr. Borden.. .. ..Printed for both distribution and sessional papers.*

42*b*. Return to an order of the House of Commons, dated 29th November, 1909, for a copy of all correspondence had between the Minister of Railways and the Transcontinental Railway Commission relating to the sub-letting of contracts for the construction of the Transcontinental Railway in New Brunswick; and the failure of sub-constractors to make payment for supplies and material furnished by farmers, merchants and others for use in said work. Presented 13th December, 1909.—*Mr. Crocket.. ..Not printed.*

42*c*. Return to an order of the House of Commons, dated 29th November, 1909, for a copy of all correspondence connected with and relating to the letter of the Auditor General to the Secretary of the National Transcontinental Railway Commission of the 18th of August, 1909, in which the Auditor General points out that 64,192 cubic yards of excavation, classified at an average price of 83·06 cents, were subsequently reclassified at $1.10¼ per cubic yard, thereby increasing the cost by the sum of $17,453.80, and asking for an explanation. Presented 13th December, 1909.—*Mr. Lennox.. .. ..Not printed.*

42*d*. Return to an order of the House of Commons, dated 17th December, 1909, for a copy of all certificates, recommendations, letters, memoranda and documents in connection with the promotion of Mr. McIntosh on the 16th of November, 1908, from the position of Division Engineer, Division No. 6, District F, to the position of Assistant District Engineer, District F, and the increase of his salary from $200 to $275 per month; also of all complaints against the professional conduct or efficiency of Mr. McIntosh made to the Transcontinental Railway or the Railway Department before the date of promotion. Presented 24th January, 1910.—*Mr. Lennox.. .. ..Not printed.*

42*e*. Return to an order of the House of Commons, dated 29th November, 1909, for a copy of all correspondence between the following legal firms: Rothwell & Johnson, Rothwell, Johnson & Bergeman, and Rothwell, Johnson & Stubbs, on the one side, and the Government or the Transcontinental Railway Commissioners, on the other side, as to the instructions to the solicitors for legal services rendered in passing titles of property

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acquired by the Government, and in respect to the bill of cost and charges of the said several firms; and all papers, documents, letters, telegrams and correspondence having any reference to the items of charges of said firms appearing on page W—370 of the Auditor General's Report of 1909, amounting in the whole to $1,376.60. Presented 24th January, 1910.—*Mr. Meighen*.. .. ..*Not printed.*

42*f*. Return to an order of the House of Commons, dated 17th December, 1909: 1. Showing the names and addresses of the engineers who surveyed and located the line of the Eastern Division of the Transcontinental Railway, and the part of the railway covered by the work of each engineer. 2. The name and address of the engineer who prepared the estimates of quantities and prices of the section or portion of the line covered by each contract. 3. The names of the engineers acting upon behalf of the Railway Department, or Railway Commission, and the Grand Trunk Pacific Railway Company, in determining upon the form and wording of the specifications, as provided for by the seventh section of the agreement between the government and the company. 4. The names of such of the engineers acting in any of the capacities aforesaid, as subsequently acted in connection with construction, when and for how long, in what capacity, where their services have been dispensed with, and for what cause. 5. The names and addresses of all the engineers in the service of the Railway Commission, or Railway Department, on Districts B and F of the said Eastern Division, since the commencement of the construction of the railway, the capacity in which each was employed, the salary in each case, the promotions, increases of salary, retirements and dismissals which have taken place, the cause for promotion, dismissal or retirement in each case, and a copy of all complaints lodged with the commissioners or their chief engineer or the department, against any of these engineers. 6. The names of the engineers now in charge of or engaged upon District B and F, and the official position and salary of each. Presented 3rd February, 1910.—*Mr. Lennox*.. .. ..*Not printed.*

42*g*. Interim Report of the Commissioners of the Transcontinental Railway, being for the nine months ended 31st December, 1909, setting forth the receipts and expenditure in connection with the Eastern Division of the National Transcontinental Railway, and such other matters in relation to the said railway as appear to be of public interest. Presented 4th February, 1910, by Hon. G. P. Graham.. .. ..*Not printed.*

42*h*. Return to an order of the House of Commons, dated 7th February, 1910, showing all written objection to classification upon the Transcontinental Railway made since July 28th, 1908, and in reference to overbreak or other over expenditure since 2nd October, 1908. Presented 17th February, 1910.—*Mr. Lennox*.. .. ..*Not printed.*

42*i*. Return to an order of the House of Commons, dated 24th January, 1910, showing: (*a*) The names of the contractors for the construction of the National Transcontinental Railway and the number, mileage and location of the contract; (*b*) the estimated expenditure under each contract at the time the contract was let, based upon the engineer's estimate of quantities, at dates of the accepted tender; (*c*) the estimated increase or decrease in expenditure in each case occasioned by change in location, specification, construction, material, grade or other change subsequent to the letting of the contract; (*d*) the amount returned and claimed on progress estimates under each contract to date, the amount actually paid under each contract, and the estimated amount yet required to complete the work in each case; (*e*) the engineer's estimated quantity of solid rock, loose rock and common excavation in the section of line covered by each contract, the estimated cost under these headings, based upon the rates of the accepted tender, the actual expenditure under these headings to date, as shown by progress estimates, the amounts actually paid to date under these headings, and the

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estimated quantities of work yet to be done, and the estimated sums yet to be paid under these headings in respect of each contract. Also as to all contracts other than the twenty-one covered by the Return brought down on the 26th of April, 1909, No. 46h: a copy of (*a*) engineer's itemized estimate of quantities as to each contract of each class of work and material, as set out in the schedules and itemized, and total estimated expenditure based upon rates of accepted tender, and (*d*) a copy of all tenders received; (*c*) itemized quantities of work and material under the various headings actually done or furnished to date, and itemized, and total expenditure therefor; itemized statement of estimated quantities of work yet to be done and material, &c., yet to be furnished and itemized, and total estimated cost of the same based on contract prices. Presented 17th February, 1910.—*Mr. Lennox.*
Not printed.

42*j*. Return to an address of the House of Commons, dated 14th February, 1910, for a copy of all correspondence, submissions, references, reports, returns and orders in council, in reference to the adjustment of the disputed item of 581 cubic yards of excavation, claimed at 10 instead of $2.50 a cubic yard, referred to in a letter of the Auditor General to the Secretary of the Transcontinental Commission, dated the 18th August, 1909. Presented 24th February, 1910.—*Mr. Lennox*.. .. ..*Not printed.*

43. Report of Robert M. Coulter, Deputy Postmaster General, on his mission to Australia and New Zealand to discuss with the governments of those countries the possibility of taking steps that would lead to the inauguration of a steamship service between England, Australia and New Zealand, via Canada, on the Atlantic and Pacific oceans. Presented 22nd November, 1909, by Sir Wilfrid Laurier.. ..*Printed for sessional papers.*

44. Return to an order of the House of Commons, dated 16th November, 1909, for a copy of all correspondence, documents and papers of every description not already brought down touching the recent treaty with the French Republic, or any modification therein. Presented 24th November, 1909.—*Mr. Borden*.. .. ..*Not printed.*

45. Minutes of proceedings of the Board of Internal Economy of the House of Commons for the past year, pursuant to Rule of the House No. 9. Presented 24th November, 1909, by the Hon. The Speaker.. .. ..*Not printed.*

46. Detailed statement of all bonds or securities registered in the Department of the Secretary of State of Canada, since last return (2nd February, 1909), submitted to the parliament of Canada under section 32 of chapter 19, of the Revised Statutes of Canada, 1906. Presented 25th November, 1909, by Hon. C. Murphy.. .. ..*Not printed.*

47. Return under chapter 125 (R.S.C), 1906, intituled: 'An Act respecting Trade Unions,' submitted to parliament in accordance with section 33 of the said Act. Presented 25th November, 1909, by Hon. C. Murphy.. .. ..*Not printed.*

48. Return of orders in council passed between the 1st of December, 1908 and the 31st October, 1909, in accordance with the provisions of section 5 of the Dominion Land Survey Act, chapter 21, 7-8 Edward VII. Presented 29th November, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

49. Return of orders in council which have been published in the *Canada Gazette* and in the *British Columbia Gazette*, between 1st December, 1908, and 31st October, 1909, in accordance with provisions of subsection (*d*) of section 38 of the regulations for the survey, administration, disposal and management of Dominion lands within the 40-mile railway belt in the province of British Columbia. Presented 29th November, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

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50. Return of orders in council passed between the 1st December, 1908, and the 31st October, 1909, in accordance with the provisions of the Forest Reserve Act, sections 7 and 13 of chapter 56, Revised Statutes of Canada. Presented 29th November, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

51. Return of orders in council passed between the 1st December, 1908, and the 31st October, 1909, in accordance with the provisions of the Rocky Mountain Park Act, section 5 of chapter 60, Revised Statutes of Canada. Presented 29th November, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

52. Return of orders in Council which have been published in the *Canada Gazette*, between 1st December, 1908, and 31st October, 1909, in accordance with the provisions of section 77 of the Dominion Lands Act, chapter 20 of the Statutes of Canada, 1908. Presented 29th November, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

53. Return to an order of the House of Commons, dated 18th November, 1909, for a copy of all correspondence and papers respecting the application by the United States immigration service to the Minister of the Interior, for the deportation of one Mrs. Goby, an alleged immigrant, to the United States of America from Canada, entering at the port of Sault Ste. Marie, Michigan, together with a copy of all orders, decisions, reports and returns regarding any action taken thereupon by the Department of the Interior. Presented 1st December, 1909.—*Mr. Boyce*.. .. ..*Not printed.*

54. General orders issued to the Militia between the 1st February, 1909, and the 1st November, 1909, inclusive. Presented 1st December, 1909, by Sir Frederirck Borden.
Not printed.

55. Report of the Ottawa Improvement Commission for the fiscal year ended 31st March, 1909. Presented 3rd December, 1909, by Hon. W. S. Fielding.
Printed for sessional papers.

56. Certified copy of a Report of the Committee of the Privy Council, approved by His Excellency the Governor General on the 12th May, 1909, on the subject of a despatch from the Right Honourable the Principal Secretary for the Colonies, transmitting an invitation from the Honorary Secretary of the 12th International Congress on Alcoholism to the Government of Canada, to appoint delegates to attend the congress in question. Presented 6th December, 1909, by Sir Wilfrid Laurier.. .. ..*Not printed.*

57. Return to an order of the House of Commons, dated 22nd November, 1909, for a copy of all memorials, reports, correspondence and documents in the possession of the government not already brought down, relating to a survey of a route for a tunnel under the Straits of Northumberland between the province of Prince Edward Island and the mainland of Canada, and also relating to the construction of such tunnel. Presented 6th December, 1909.—*Mr. Warburton*.. .. ..*Not printed.*

58. Return (in so far as the Department of the Interior is concerned) of copies of all orders in council, plans, papers, and correspondence which are required to be presented to the House of Commons, under a resolution passed on 20th February, 1882, since the date of the last return, under such resolution. Presented 7th December, 1909, by Hon. F. Oliver.. .. ..*Not printed.*

58a. Return of lands sold by the Canadian Pacific Railway during the year ended on the 31st October, 1909. Presented 18th January, 1910, by Hon. F. Oliver.. .. ..*Not printed.*

59. Return to an address of the House of Commons, dated 16th November, 1909, for a copy of all orders in council at present in force with reference to immigration; also a copy of all regulations in force at the present time in connection with immigration in Canada. Presented 9th December, 1909.—*Mr. Wilson (Lennox)*.. .. .. ..*Not printed.*

CONTENTS OF VOLUME 19—*Continued.*

60. Return to an order of the House of Commons, dated 22nd November, 1909, showing:— 1. The application made to the Railway Board for protection of railway crossings under the provisions of chapter 32 of the Statutes of 1909, an Act to amend the Railway Act, and (*a*) the cases in which these applications have been granted, (*b*) in which they have been refused, when refused, and the reason for refusal. 2. The names of the persons in each case making the application. 3. The cases in which the board of its own motion made an order for the protection of crossing under said act. 4. The appropriation made by the board out of the Railway Grade Crossing Fund under said act, and the crossing in respect of which such appropriations were made. 5. The character or description of the crossing in question, and the character, description and cost in each case of the construction work of protection ordered or directed by the board. 6. The amount in each case ordered or directed by the board to be paid out of the said fund and by the railway company and municipality or other party to the proceedings. 7. The cases in which the work ordered to be done (*a*) has been completed, (*b*) in which it is under construction, (*c*) the cases in which the municipality has submitted to or complied with the order of the board, and (*d*) cases in which the municipality has refused to comply. Presented 14th December, 1909.—*Mr. Lennox.*
Not printed.

61. Return to an order of the House of Commons, dated 24th November, 1909, showing what Indian lands within the territories now covered by each of the provinces of Manitoba, Saskatchewan and Alberta, have been sold yearly since 30th June, 1900; such information to be detailed as follows: the name of each reserve, the area sold therein yearly, the average prices realized, and the cash paid to the Indians concerned at the time of sale, under the terms of surrender. Presented 15th December, 1909.—*Mr. McGrath.*
Not printed.

62. Return to an order of the House of Commons, dated 22nd November, 1909, showing the areas sold or leased as oil lands in the Northwest, giving the amount sold or leased, the date when, and the parties to whom sold or leased, and if leased, the various assignments, if any, made thereof, and the dates of the same. Presented 15th December, 1909.—*Mr. Foster*.. .. ..*Not printed.*

63. Return to an order of the House of Commons, dated 16th November, 1909, showing: Copy of the contract for the dredging of the Napanee river during the summer of 1909; name of the contractor who had the contract; names of the engineers in charge of the work and the inspector; the depth and width of the channel after dredging; the length of time taken to complete the work; the total amount of money expended on the work; whether the work was done by day work or by the yard; and the prices paid by day or by yard. Presented 15th December, 1909.—*Mr. Wilson (Lennox).*
Not printed.

64. Return made to parliament in accordance with chapter 47, section 4, Revised Statutes, 1906, containing copy of the orders in council for the issue of licenses to United States fishing vessels to enable them to buy bait, ice, lines, &c. during the year 1910. Presented 16th December, 1909, by Hon. L. P. Brodeur.. .. ..*Not printed.*

65. Return, in pursuance of section 16 of the Government Annuities Act, 1908, containing statement of the business done during the fiscal year ending March 31st, 1909, together with a copy of the regulations made under section 13 of the act. Presented 17th December, 1909, by Hon. W. S. Fielding.. .. ..*Printed for sessional papers.*

66. Report of the Commissioner, Dominion Police Force, for the year 1909. Presented 12th January, 1910, by Hon. A. B. Aylesworth.. .. ..*Not printed.*

CONTENTS OF VOLUME 19—*Continued.*

67. Return to an order of the House of Commons, dated 29th November, 1909, for a copy of all reports and correspondence in connection with section 29, township 9, range 22, west of the 4th meridian, as well as applications for railway right of way and station grounds within such land. Presented 12th January, 1910.—*Mr. McGrath..Not printed.*

68. Return to an order of the House of Commons, dated 6th December, 1909, for a copy of all papers, reports, correspondence, &c., between the Department of the Interior and its officers and agencies and any other persons, relative to the s.w. ¼ section 24-38-10 w. 3rd m., and the respective claims of Allan R. Mudie and Thos. G. Warwick. Presented 12th January, 1910.—*Mr. Lake.. .. ..Not printed.*

69. Return to an order of the House of Commons, dated 15th December, 1909, showing the names of the two hundred and twenty-one members of the House of Commons, as provided for in 6-7 Edward VII., Dominion Statutes, 1907, chapter 41, section 1, excepting only such seat or seats as have fallen vacant. Presented 12th January, 1910.—*Mr. White (Renfrew).. .. ..Not printed.*

70. Return to an order of the House of Commons, dated 24th November, 1909, showing the total number of incubators and brooders, respectively, imported into Canada from the United States during the fiscal year ending March 31st, 1909, and the total cost of each. Presented 13th January, 1910.—*Mr. White (Renfrew).. .. ..Not printed.*

71. Return to an order of the House of Commons, dated 22nd November, 1909, for a copy of all letters, telegrams, applications, contracts and correspondence with regard to the taking of spawn for the fish hatchery at Snake Island, Winnipegosis, for the years 1907, 1908 and 1909. Presented 13th January, 1910.—*Mr. Campbell.. .. ..Not printed.*

72. Return to an order of the House of Commons, dated 15th December, 1909, showing a list of all exports, technical advisers, and special officers generally, engaged by the government in connection with the naval defence programme and its execution, giving names, special qualifications, duration of engagement and rate of remuneration, as well as the total amount expended to date under the above; also amounts expended to date for articles, books, instruments and objects of all kinds in connection with said naval defence programme. Presented 13th January, 1910.—*Mr. Monk.*

Printed for sessional papers.

73. Return to an order of the House of Commons, dated 29th November, 1909, showing the number of lighthouses in British Columbia, the salaries of the lightkeepers at the end of the financial year 1907-1908; what the salaries are to-day; why some salaries have been reduced and when such reduction took place. Presented 13th January, 1910.—*Mr. Smith (Nanaimo).. .. ..Not printed.*

74. Return to an address of the House of Commons, dated 18th November, 1909, for a copy of all orders in council, correspondence, documents and papers of every description relating to the proposed sale or disposal of any part of the Peigan Indian Reserve in the province of Alberta, including any advertisement of such sale and record of the proceedings, whether by vote or otherwise, under which any of the Indians on said reserve purported to give their consent thereto. Also a return showing the actual number of Indians on said reserve entitled to vote or elect in respect of such proposed sale, and all other information in the possession of the department or its officials relating to or in any way referring to the proceedings in connection with such proposed sale. Presented 13th January, 1910.—*Mr. Herron.. .. ..Not printed.*

CONTENTS OF VOLUME 19—*Continued.*

75. Return to an order of the House of Commons, dated 17th December, 1909, for a copy of all papers, reports, correspondence, &c., between the Department of the Interior, and its officers and agencies, and any other person, relative to the s.w. ¼ section 16-30-9, w. 3rd m., and the respective claims thereto of Thomas Paterson and J. F. Sibbald. Presented 13th January, 1910.—*Mr. Lake*.. .. ..*Not printed.*

76. Return to an order of the House of Commons, dated 24th November, 1909, showing approximately the amount of revenue collected by the government between the 1st January, 1908, and the 1st November, 1909, in the province of Alberta and Saskatchewan, respectively, on account of payments for coal lands, coal royalties, bonuses and rental on timber lands, timber dues, hay lands, grazing lands, irrigation areas, school lands, minerals, water powers, stone quarrying lands, Indian lands, or on account of any natural resources within each of the above provinces. Presented 13th January, 1910.—*Mr. McCarthy*.. .. ..*Not printed.*

77. Return to an order of the House of Commons, dated 17th December, 1909, for a copy of all documents and papers relating to the western shipment of grain. Presented 13th January, 1910.—*Mr. Taylor (Leeds)*.. .. ..*Not printed.*

78. Return to an order of the House of Commons, dated 24th November, 1909, for a copy of all letters, correspondence and complaints, or other papers, from Indians or others regarding the manner in which the St. Peter's Indians have been treated relating to lands allotted to them by the government in consideration of the surrender of St. Peter's Reserve. Presented 13th January, 1910.—*Mr. Bradbury*.. .. .. ..*Not printed.*

78*a*. Return to an order of the House of Commons, dated 13th December, 1909, for a copy of all instructions to J. O. Lewis, Indian Agent at Selkirk, regarding the delivery of patents to Indians entitled to same, in connection with the surrender of St. Peter's Reserve. Presented 13th January, 1910.—*Mr. Bradbury*.. .. ..*Not printed.*

78*b*. Return to an order of the House of Commons, dated 6th December, 1909, showing all moneys paid by the government in connection with the surrender of St. Peter's Reserve, to whom paid, and for what; also all moneys paid in connection with the moving of the Indians to the new reserve on Lake Winnipeg, to whom paid, and for what. Presented 13th January, 1910.—*Mr. Bradbury*.. .. ..*Not printed.*

78*c*. Return to an order of the House of Commons, dated 29th November, 1909, for a copy of all instructions sent to the Indian Agent at Selkirk, in connection with St. Peter's Indians pledging or disposing of their holdings, secured through the surrender of their reserve; a statement showing all those entitled to receive patents for lands in connection with the surrender of the reserve, the applications made by those so entitled for their patents, and receipts signed for the patents by those so entitled on delivery of the patent. Presented 13th January, 1910.—*Mr. Bradbury*.. .. ..*Not printed.*

78*d*. Copy of papers relating to St. Peter's Indian Reserve, comprising letters of instructions and commission to Mr. H. M. Howell, Report of H. M. Howell, and advertisement in connection with auction sale of lands. Presented 27th January, 1910, by Hon. F. Oliver.. .. ..*Not printed.*

78*e*. Return to an order of the House of Commons, dated 17th January, 1910, for a copy of all accounts of George Tracy, of Selkirk, against Indians of St. Peter's Reserve, Manitoba, now on file in the Department of Indian Affairs here, and of all correspondence in the department in relation therto. Presented 31st January, 1910.—*Mr. Bradbury*.. .. ..*Not printed.*

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78*f*. Return to an order of the House of Commons, dated 14th February, 1910, for a copy of all papers and instructions given to A. S. Williams, Law Clerk of the Department of Indian Affairs, and to S. Swinford, Inspector of Indians, Winnipeg, in connection with their work among the St. Peter's Indians in Manitoba; also a copy of the report of these gentlemen in connection with the work they have been engaged in during the last few weeks among the St. Peter's Indians. Presented 4th April, 1910.—*Mr. Bradbury.*
Not printed.

79. Return to an order of the Senate, dated 26th November, 1909, for a copy of the several complaints which in 1908 and 1909 have been made by different parties to the Minister of the Interior or to the Superintendent of Immigration of the manner in which immigrants are treated at Quebec. Presented 13th January, 1910—*Hon. Mr. Landry.*
Not printed.

80. Return to an order of the Senate, dated 2nd December, 1909, for a copy of all accounts filed during the fiscal year 1907-8 in the Department of the Interior by Sosthène Morisset, one of the clerks of the Immigration office at Quebec. Presented 13th January, 1910.—*Hon. Mr. Landry.. .. .. .

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80*g*. Return to an order of the Senate, dated 10th March, 1910, for the production of all complaints made to the Department of the Interior against the present Immigration Agent at Quebec, and of all the correspondence exchanged on this subject between the different parties in question and the department or any of its officers. Presented 6th April, 1910.—*Hon. Mr. Landry*.. .. .. .

CONTENTS OF VOLUME 19—*Continued.*

82. Return to an order of the House of Commons, dated 6th December, 1909, for a copy of all correspondence, reports, documents and papers touching the matter of the salmon fishery of Salmon River, Digby county, N.S., and the fishways or passes in said river. Presented 17th January, 1910.—*Mr. Jameson*.. .. ..*Not printed.*

83. Return to an order of the House of Commons, dated 22nd November, 1909, for a copy of all reports, correspondence and other papers relating to the condition and maintenance of the buoy on the Old Proprietor Ledge in the Bay of Fundy since January 1st, 1908; also of all reports, correspondence and other papers relating to the establishment, equipment, maintenance and operation of the life boat and life saving station at Seal Cove, in the Bay of Fundy; also copy of all instructions issued to Captain Lugar in connection with the inquiry into the wreck of the ss. *Hestia*, and of the findings and report on said inquiry. Presented 17th January, 1910.—*Mr. Daniel*.. .. ..*Not printed.*

83*a*. Supplementary Return to No. 83. Presented 14th February, 1910.. .. .. ..*Not printed.*

84. Return to an order of the House of Commons, dated 15th December, 1909, showing: 1. The present indebtedness to the Dominion government of the Montreal Turnpike Trust (*a*) on capital account, (*b*) for arrears of interest. 2. The amount collected at each toll gate belonging to the said turnpike trust during the year ending 31st December, 1908, and for the first six months of the year 1909. 3. The names of all parties who have commuted their tolls during each of the two above mentioned periods and the amount of the commutation money paid to the trust in each case. 4. The amount expended on each section or road division under the control of said trust, during the year ending 31st December 1908, and the contracts given out during the said year, with the name of the contractor and the date and amount of money involved in each case; and a statement in each case also as to whether the contract was awarded after tender called through newspapers. 5. The amount paid out during the said two first above-mentioned periods at each toll gate for salaries of day and night guardians and any other expenditures at each of the toll gates maintained. 6. The names of all parties holding passes for free use of the roads under control of said trust during the period above mentioned, with a statement, in each case, of the reason why the pass was so granted. 7. The expenses of the said trust during each of the two periods above mentioned for rent, salaries of the office, inside or outside service, giving name and remuneration of each official and amounts paid to any civil engineer employed by the trust. 8. The actual present indebtedness in detail of said trust outside of its bonds due to the government of Canada. 9. The amounts collected by said trust during the above-mentioned periods from municipalities under special agreements made as to their share pro rata of the bonded indebtedness of the turnpike trust. 10. The names of all members of the trust elected to represent the bondholders, with date of election in each case, during said two periods. 11. The amounts paid by the trust to any of its members or officials during said two periods, whether as travelling or personal expenses, or indemnity for attendance or for any other reason whatever. 12. The name of any auditor who has acted during said two periods, and the amount paid such auditor. 13. An exact statement of any amounts paid by the trust for purchase or lease of any property outside of the city of Montreal and in defraying the travelling or displacement or maintenance expenses of the trustees or their officials generally. Presented 17th January, 1910.—*Mr. Monk*.. .. ..

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85*a*. Return to an order of the House of Commons, dated 15th December, 1909, for a copy of petition of right of pleas offered in defence in the case of the suit of the North Atlantic Trading Company vs. the King, in the Exchequer Court, and of all correspondence as well as reports and petitions which led up to the government granting a fiat to the suppliant; and a copy of all letters having reference to the said claim now sued upon from the time of the final payment to the said North Atlantic Company. Presented 20th January, 1910.—*Mr. Monk*.. .. ..*Not printed.*

86. Return to an order of the House of Commons, dated 6th December, 1909, for a copy of all correspondence, documents, and reports since the 1st January, 1908, between our immigration agents in Belgium and the Minister of the Interior. Presented 20th January, 1910.—*Mr. Paquet*.. .. ..*Not printed.*

86*a*. Return to an order of the House of Commons, dated 18th November, 1909, giving the names and addresses of all immigration agents at the present time employed by the government in Great Britain, the continent of Europe, and the United States, on salary, the amount of salary paid to each, the amount of other perquisites paid to each, if any; the names and addresses of all immigration agents at the present time employed by the government in the above countries on commission, the amount of such commission, the rate of commission per immigrant, the amount of other perquisites paid to each; the names and addresses of all special immigration agents in the above countries appointed during the fiscal years 1908-9 and up to 1st November, 1909, the date of the appointment of each, the address of each at the time of his appointment, the amount of salary, commission, or other perquisites paid to each, and the length of time served by each in respect of such appointment. Presented 4th February, 1910.—*Mr. Wilson (Lennox)*.. .. ..*Not printed.*

87. Return to an order of the House of Commons, dated 1st December, 1909, showing all casualties and accidents attended with danger or loss of human life, that have occurred in the Marine and Fisheries Department owing to the operation of pintsch and acetylene gas as an illuminant, for each year since 1880, together with a copy of all papers and reports in connection therewith. Presented 20th January, 1910.—*Mr. Foster.*
Not printed.

88. Return to an order of the House of Commons, dated 6th December, 1909, for a copy of all correspondence, petitions, and other papers between any person or persons and the government, or any member thereof, or any official thereof, with reference to the dredging of the Napanee river. Presented 20th January, 1910.—*Mr. Wilson (Lennox).*
Not printed.

89. Return to an order of the House of Commons, dated 13th December, 1909, for a copy of all correspondence had between the Post Office and Public Works Departments, together with all reports and other documents relating to the necessity of providing adequate post office accommodation in the city of Lethbridge. Presented 20th January, 1910.—*Mr. Magrath*.. .. ..*Not printed.*

89*a*. Supplementary Return to No. 89. Presented 18th February, 1910.. .. .. ..*Not printed.*

90. Interim Report of the Dominion Fisheries Commission for the investigation of the waters on Lac du Bonnet fisheries. Presented 20th January, 1910, by Sir Wilfrid Laurier.. .. ..*Not printed.*

90*a*. Interim Report of the Dominion Fisheries Commission for the investigation of the waters of Manitoba and the West. Presented 20th January, 1910, by Sir Wilfrid Laurier.. .. ..*Not printed.*

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90*b*. Return to an order of the House of Commons, dated 22nd November, 1909, for a copy of all letters, telegrams, applications, contracts, lease or leases and correspondence with regard to Lac du Bonnet fishing. Presented 27th January, 1910.—*Mr. Campbell.* *Not printed.*

90*c*. Return to an address of the House of Commons, dated 4th February, 1909, for a copy of all correspondence, orders in council, papers and documents relating to the question of fisheries in the Pembina river, in the province of Manitoba, and of regulations or agreements with the United States government in reference to the rivers running from one country into the other. Presented 14th February, 1910.—*Mr. Sharpe (Lisgar).* *Not printed.*

91. Return to an order of the House of Commons, dated 15th December, 1909, for a copy of the pay sheets of the employees on the Lachine canal under the supervision of Denis O'Brien for the months of May, June, July, August, September, October and November. Presented 24th January, 1910.—*Mr. Verville*.. .. ..*Not printed.*

92. Return to an order of the House of Commons, dated 24th January, 1910, for a copy of all instructions given during his term of office by the Honourable Speaker Blanchet, to the then sergeant-at-arms, or to other officials in connection with the appointment of sessional messengers. Presented 26th January, 1910.—*Mr. Monk*.. .. .. ..*Not printed.*

93. Return to an order of the House of Commons, dated 18th November, 1909, showing the number of fatal accidents resulting from the use of explosives in the construction of railways and other public works in Canada, reported to either the Department of Railways and Canals, the Department of Public Works, or the National Transcontinental Railway Commissioners, within the past three years; the nature of investigation, if held, after each accident; and what precautions have been taken to prevent or minimize the number of accidents from the use of explosives on construction work in Canada under control of governrment officials. Presented 26th January, 1910.—*Mr. Robb*.. .. ..*Printed for sessional papers.*

94. Return to an order of the House of Commons, dated 18th November, 1909, for a copy of all applications, petitions, letters, telegrams, documents, plans, specifications and correspondence with reference to, and in any way concerning the application for subsidy for the building of a dry-dock and ship-building yard by certain persons, or company, at or in the vicinity of the town of Sault Ste-Marie, Ontario. Presented 26th January, 1910.—*Mr. Boyce*.. .. ..*Not printed.*

94*a*. Return to an order of the House of Commons, dated 18th November, 1909, for a copy of all applications, petitions, letters, telegrams, documents, plans, specifications and correspondence with reference to and in any way concerning the application for subsidy for the building of a dry-dock and ship-building yard by certain persons, or company, at or in the vicinity of the town of Port Arthur, Ontario. Presented 11th March, 1910.—*Mr. Boyce*.. .. ..*Not printed.*

95. Return to an order of the House of Commons, dated 17th December, 1909, showing: 1. A description by sections, townships and ranges, with areas of all lands included in the area controlled by the Southern Alberta Land Company under agreements with the government, and the date of expiry of such agreements. 2. A description by sections, townships and ranges with areas of all lands held under grazing lease or leases or assignment of leases and now controlled by Messers. Cowdry & Maunsall, or either of them, of lands which lie between the Bow and Belly rivers, bounded on the east by range 12 and on the west by range 19, west of the fourth meridian. Presented 27th January, 1910.—*Mr. McCarthy*.. .. ..*Not printed.*

CONTENTS OF VOLUME 19—*Continued.*

96. Return to an order of the House of Commons, dated 17th January, 1910, showing: 1. What amount has been annually expended by the government since the year 1900 in connection with the Atlantic Fisheries of Canada, apart from sums spent in the fishery protection service and for bounty, in the respective provinces of Nova Scotia, New-Brunswick, Prince Edward Island and Quebec. 2. The amount expended in each of the said provinces annually for fishery breeding purposes, dog-fish reduction plants, bait freezers, cold storage and salaries of officials, respectively. 3. What other general purposes in connection with the fisheries expenditures were made in such provinces within said period. Presented 27th January, 1910.—*Mr. Jameson*.. .. .. ..*Not printed.*

97. Regulations of the National Parks of Canada. Presented 28th January, 1910, by Hon. F. Oliver.. .. ..*Printed for sessional papers.*

98. Return to an order of the House of Commons, dated 19th January, 1910, showing all tenders called for by the Department of Railways and Canals, or the purchasing agent of the Intercolonial Railway of Ottawa, at any time during the year 1909, for wire fencing; a copy of any tenders received for such fencing, with the names of the tenderers, and the prices quoted by the said parties tendering for the different kinds of fencing; the names of the successful tenderers, and the particular kind of fencing bought, the gauge of wire, number of stands and distances apart of the brackets in uprights; the price per rod, and where the wire was manufactured. Presented 1st February, 1910.—*Mr. Wilcox*.. .. ..*Not printed.*

98*a*. Return (in part) to an order of the House of Commons, dated 1st December, 1909, for a copy of all papers in connection with the alleged securing and sale or distribution of passes on the Intercolonial Railway within the last two years, and also of all papers of every kind in connection with the alleged padding of pay-lists on the Windsor Branch Railway, and the re-sale of mutilated railway ties to the government. Presented 16th February, 1910—*Mr. Foster*.. .. ..*Not printed.*

98*b*. Return to an order of the House of Commons, dated 24th January, 1910, showing: 1. How many derailments have taken place on the Intercolonial Railway during the year 1909. 2. At what points of the railway each of these derailments took place, and at what dates. 3. The report made in each case, and the cause or causes mentioned in such report. Presented 17th February, 1910.—*Mr. Talbot*.. .. ..*Not printed.*

98*c*. Return to an order of the House of Commons, dated 7th February, 1910, showing: Since the beginning of the autumn train service of 1909 on the Intercolonial Railway, at what time the train leaves Oxford Junction every week day morning for Pictou is due to leave Oxford Junction and arrive at Pictou; the actual time at which the train departed each day from Oxford Junction, the actual time at which it arrived each day at Pictou; the causes of the delay, if any; and what efforts are being made to improve the service in respect of time. Presented 24th February, 1910.—*Mr. Rhodes*.. .. ..*Not printed.*

98*d*. Return to an order of the Senate dated 15th February, 1910, for a statement showing in so many distinct columns: 1. The names of all the employees of the Intercolonial Railway who have been dismissed or who have resigned since the Intercolonial Railway was put under the direction of the Commission of that road. 2. The respective salaries of such employees. 3. The date of their appointment. 4. The date of their dismissal. 5. The number of the division or of the section of the railway where they were employed. 6. The domicile of such employees at the time of their dismissal. Presented 19th April, 1910.—*Hon. Mr. Landry*.. .. ..*Not printed.*

CONTENTS OF VOLUME 19—*Continued.*

98*e*. Return to an order of the House of Commons, dated 14th March, 1910, showing: Since the appointment of the Government Railways' Managing Board, how many employees of the Intercolonial Railway have been dismissed at Truro, at Halifax, and at Stellarton, respectively, with their respective names; at what kind of work each was employed; on what dates, respectively, each one was dismissed; how many of them since re-employed; on what dates, respectively, each one was re-employed; how long since such re-employment each one has remained in the service; how many of them are still in the service, with their names and what each one is employed at. Presented 20th April 1910.—*Mr. Rhodes*.. .. ..*Not printed.*

98*f*. Return to an order of the House of Commons, dated 22nd November, 1909, showing the number of passes issued on the Intercolonial Railway from October 1st, 1908, to October 1st, 1909, whether annual, return trip or trip, to whom issued, the authority and upon whose recommendation the passes were issued and reasons for the issue, the several points at which these passes took effect and the destination, and also a copy of the agreement entered into by the various railways of Canada regarding the non-issuing of passes. Presented 20th April, 1910.—*Mr. Stanfield*.. .. ..*Not printed.*

99. Return to an order of the House of Commons, dated 6th December, 1909, for a copy of all letters, communications, petitions and correspondence with and by the government, or any minister, with regard to the appointment of some one to fill the vacancy on the Board of Railway Commissioners, caused by the demise of the late Honourable Thos. Greenway. Presented 1st February, 1910.—*Mr. Campbell*.. .. .. ..*Not printed.*

100. Return to an address of the House of Commons, dated 29th November, 1909, for a copy of all memorials, reports, correspondence and documents in the possession of the government, relating to the reduction of the representation in the House of Commons, of the several provinces of Nova Scotia, New Brunswick and Prince Edward Island, and of all correspondence with the governments of these provinces with regard to the restoration to the said provinces of such representation as they respectively had at the time of their becoming provinces of this Dominion. Presented 1st February, 1910.—*Mr. Warburton*.. .. ..*Printed for sessional papers.*

101. Return to an order of the House of Commons, dated 19th January, 1910, for a copy of all declarations, affidavits and solemn declarations made and sent to the Post Office Department, or to the Honourable the Postmaster General, since the first day of September, 1907, up to the fifteenth day of January, 1910, respecting the franking privilege asked for the Arthabaska *Gazette*, with copies of the lists of pretended subscribers to that newspaper with the said declarations, affidavits and solemn declarations; also a copy of the report of Mr. A. Bolduc, Post Office Inspector, respecting the said Arthabaska *Gazette*. Presented 2nd February, 1910.—*Mr. Lavergne.*

Not printed.

102. Return to an order of the House of Commons, dated 13th December, 1909, showing a list of the free mail delivery routes which have been established in Canada, including the port of departure and the place of arrival, the length of each, the number of houses on each route, and the number of boxes on each route. Presented 3rd February, 1910.—*Mr. Armstrong*.. .. ..*Printed for sessional papers.*

102*a*. Return to an order of the House of Commons dated 6th December, 1909, for a copy of all papers, letters, telegrams, documents and correspondence with reference to or in any way concerning the installation of free mail delivery service in the city of Sydney, N.S. Presented 17th February, 1910.—*Mr. Maddin*.. .. ..*Not printed.*

CONTENTS OF VOLUME 19—*Continued.*

103. Return to an order of the House of Commons, dated 3rd February, 1910, for a copy of the report of Commander Wm. Wakeham, Special Commissioner and Inspector of Fisheries for the Gulf of St. Lawrence, on the Lobster Industry of the Maritime Provinces and the province of Quebec. Presented 3rd February, 1910, by Sir Wilfrid Laurier.. .. ..*See Sessional Paper No. 22a.*

104. Return to an order of the House of Commons, dated 17th January, 1910, for a copy of all correspondence, reports, despatches, documents and other papers relating in any way to the claim for a homestead, by the members of the family of Angus Sauve, who was in the African campaign, and who died a short time after his arrival in the country. Presented 4th February, 1910.—*Mr. Boyer*.. .. ..*Not printed.*

104*a*. (1909). 1. International Boundary Waters Treaty, signed at Washington, 11th January, 1909. 2. Rider attached by the United States Senate.

Printed for both distribution and sessional papers.

105. Report of a system of uniform and common international regulations for the protection and preservation of the food fishes in international boundary waters of Canada and the United States. Prepared by the International Fisheries Commission pursuant to and under the authority of the Convention of April 11, 1908, between Great Britain and the United States. Presented 4th February, 1910, by Sir Wilfrid Laurier.. .. ..*Printed for distribution.*

106. Return to an order of the House of Commons, dated 19th January, 1910, for a copy of all papers, letters, telegrams, documents and correspondence, occurring during the first six months of 1908, in connection with suggested amendments to the Northwest Irrigation Act. Presented 7th February, 1910.—*Mr. Magrath*.. .. ..*Not printed.*

107. Return to an address of the House of Commons, dated 16th November, 1909, for a copy of all petitions addressed to His Excellency the Governor General of Canada, or to the government, or any department thereof; also of all letters, correspondence of all kinds, and all reports had by the government in reference to the navigation, cleaning and deepening of the river known as River des Prairies, following along the northern boundary of the island of Montreal. Presented 7th February, 1910.—*Mr. Monk.*

Not printed.

107*a*. Report of Mr. G. de G. Languedoc, assistant engineer, in respect of work required to be done along Rivière des Prairies, to give a five-foot channel at low water for navigation. Presented 15th February, 1910, by Hon. W. Pugsley.. .. ..*Not printed.*

108. Return to an order of the House of Commons, dated 24th January, 1910, showing what interest or control the Canadian Northern Railway Company has in any of the following railway companies: The Ontario and Rainy River Railway Company, the Port Arthur, Duluth & Western Railway Company, the Manitoba & Southeastern Railway Company, the Minnesota & Manitoba Railway Company, the Minnesota & Ontario Bridge Company, the Saskatchewan Northwestern Railway Company, the Qu'Appelle, Long Lake & Saskatchewan Railway Company, the Alberta Midland Railway Company, the Edmonton, Yukon and Pacific Railway Company. 2. What subsidies either in land, money or by way of guarantee of securities have been granted to any of the railway companies mentioned on account of the main or branch lines or both, of the said companies, either by the Dominion government, or the provincial governments of Ontario, Manitoba, Saskatchewan and Alberta, or any municipality through which their lines run. 3. What portion of these subsidies have been earned to date. 4. How many miles west of Edmonton a line of railway is constructed and in operation

CONTENTS OF VOLUME 19—*Continued.*

by the Canadian Northern Railway Company. 5. What work other than location survey work has been done west of this point up to date, how much and of what nature. 6. What portion, if any, will eventually form part of the proposed line to Vancouver. 7. When the location plan of the route of the C.N.R. between Edmonton and Vancouver, by way of the Yellow Head Pass was approved by the Minister of Railways and the Board of Railway Commissioners. 8. What applications, if any, have been made since to change or in any way alter this location plan. 9. To what extent, if any, the government of Manitoba has exercised its right of control of freight rates under section 8 of schedule B of the Act 1 Edward VII, chapter 53. 10. What effect, if any, this section of said act has had in reducing freight rates in the province of Manitoba. Presented 8th February, 1910.—*Mr. Lennox*.. .. ..*Not printed.*

109. Return for the year ended 31st December, 1909, of permits to take intoxicants into the Northwest Territories, in accordance with the requirements of chapter 62, section 88, of the Revised Statutes of Canada. Presented 8th February, 1910, by Hon. F. Oliver. *Not printed.*

110. Return to an order of the House of Commons, dated 6th December, 1909, showing how many officials of the government, or of the Senate or House of Commons, have residences or living rooms in Ottawa supplied by the Crown, with the estimated yearly value and the rent charged in each case. Presented 14th February, 1910.—*Mr. Blain.* *Not printed.*

110*a*. Supplementary Return to No. 110. Presented 24th February, 1910... ..*Not printed.*

111. Return to an order of the Senate, dated 26th January, 1910, showing the total amount of lands set apart for school purposes in Rupert's Land, or what now comprises the provinces of Manitoba, Saskatchewan and Alberta. The amount of said lands sold for school purposes yearly before the formation of the provinces of Saskatchewan and Alberta, and the average price realized per acre for same. The amount sold yearly in all the said provinces up to the year 1910, and the average price realized for same. The total amount of acres of school lands yet remaining unsold in the said provinces. Presented 15th February, 1910.—*Hon. Mr. Davis*.. .. ..*Not printed.*

112. Return to an order of the House of Commons, dated 6th December, 1909, showing the amount received by the Minister of Finance under the Land Titles Act, section 159, cap. 110, R.S.C., 57 and 58 Vic., cap. 28, sec. 116; how such fund is invested under sec. 160 of the same Act; the amount of interest which has accrued from said fund; and the amount paid for losses arising from bad titles guaranteed by said fund. Presented 22nd February, 1910.—*Mr. Macdonell*.. .. ..*Not printed.*

113. Return to an order of the House of Commons, dated 17th January, 1910, showing: 1. The name, cost, date of construction, place of construction, and gross tonnage of each of the steam vessels now owned by the Dominion government. 2. The names of those built in Canada. 3. What ones thrown open to Canadian competition. 4. In each case that was open to Canadian competition, the difference between the lowest Canadian tender and the price paid. 5. In each case where a contract was made with a builder for the construction of any of said steam vessels, the month and day when each of said contracts were signed, and when each of said contracts called for delivery of vessels. 6. The price each of the said steam vessels would have cost if the government in each case paid the current Canadian customs duty chargeable on vessels constructed outside of Canada. Presented 24th February, 1910.—*Mr. Sinclair.* *Printed for sessional papers.*

CONTENTS OF VOLUME 19—*Continued.*

114. Return to an order of the House of Commons, dated 15th March, 1909, showing: 1. The number and names of the various dredges owned by the government. .2 When and by whom constructed, or when and from whom purchased. 3. The price paid for each dredge. 4. On what work each dredge has been engaged in in each of the years 1905, 1906, 1907 and 1908. 5. How many months during each of these years each dredge was working, and how many cubic yards of material each dredge removed per month. 6. The cost of maintaining and cost of operating each dredge for each of these years. 7. The names of the dredges leased during these years, if any, to whom leased, on what terms, and what amounts were received each year under such leases. Presented 24th February, 1910.—*Mr. German*.. .. ..*Not printed.*

115. Return to an order of the House of Commons, dated 19th January, 1910, for a copy of all letters, telegrams, petitions and other correspondence in connection with the establishing of a post office to be named Charleston or Kelmont, on the south side of Assiniboine river, in the parish of St. Charles, province of Manitoba. Presented 24th February, 1910.—*Mr. Staples*.. .. ..*Not printed.*

116. Return to an order of the House of Commons, dated 7th February, 1910, for a copy of all correspondence between the District Officer Commanding Military District Number 11 and the Department of Militia, with reference to the battery of 12-pounder B.L. guns recently sent to Esquimalt, or with reference to the proposal that No. 1 Company of the 5th Regiment, C.A., should train on said guns. Presented 24th February, 1910.—*Mr. Barnard*.. .. ..*Not printed.*

117. Return to an order of the House of Commons, dated 7th February, 1910, showing the total cost to Canada of the Military College buildings and grounds, and the amount furnished each year by the government towards its maintenance. Presented 24th February, 1910.—*Mr. Armstrong*.. .. ..*Printed for sessional papers.*

118. Return to an order of the House of Commons, dated 7th February, 1910, for a copy of all papers, affidavits and correspondence between the Interior Department and John A. Dunn, or anyone in his behalf, and any official of the department, concerning the application for patent of the n.w. ¼ sec. 34, tp. 35, range 16, west of the 2nd meridian. Presented 24th February, 1910.—*Mr. Roche*.. .. ..*Not printed.*

119. Statement of the affairs of the British Canadian Loan and Investment Company (Limited), for the year ended 31st December, 1909. Also a list of the shareholders on 31st December, 1909, in accordance with chapter 57 of 39 Victoria. Presented (Senate) 25th February, by the Hon. the Speaker.. .. ..*Not printed.*

120. Return to an order of the Senate, dated 23rd November, 1909, for a copy of each charter granted since 1st June, 1909, by the Secretary of State, by letters patent under The Companies Act, chapter 79 of the Revised Statutes, 1906. (*a*) Incorporating any company with powers for the development, production, distribution or use of water power for any purposes; or with powers for the production, distribution and use of water power for any purposes; or with powers for the production, distribution and use of electricity in any form by any means, whether directly or by the transformation thereof into heat, light, power or any other kind of energy; or (*b*) conferring such powers upon any company previously incorporated. Presented 1st March, 1910.—*Hon. Mr. David*.. .. ..*Not printed.*

CONTENTS OF VOLUME 19—*Continued.*

121. Return to an order of the House of Commons, dated 14th February, 1910, showing the amounts that have been paid to the *Whig* Publishing Company for printing and advertising by or for any departments of this government other than Militia and Defence and Marine and Fisheries, each year, from 1896 to the present time. Presented 2nd March, 1910.—*Mr. Edwards*.. .. ..*Not printed.*

121*a*. Supplementary Return to No. 121. Presented 10th March, 1910.. .. .. ..*Not printed.*

122. Return to an order of the House of Commons, dated 29th November, 1909, for a copy of all letters, correspondence, papers, bills and memorials, passing between the government of the province of Manitoba and the Dominion government since 1st January, 1907. Presented 2nd March, 1910.—*Mr. Roche*.. .. ..*Not printed.*

122*a*. Return to an address of the House of Commons, dated 28th February, 1910, and also of the Senate, dated 24th February, 1910, for a copy of all correspondence between the Dominion government and the government of Manitoba on the subject of the extension of the boundaries of the province of Manitoba since the resolution adopted by the House of Commons on the 13th day of July, 1908. Presented 2nd March, 1910.—*Hon. Mr. Watson and Mr. Molloy*.. .. ..*Not printed.*

123. Return to an address of the Senate, dated 3rd February, 1910, for the production of all correspondence between the Honourable George E. Foster, M.P., and the government of Canada, or any of their members since the year 1878, in relation to appointment of judges to the judicial bench and of members to the Senate of Canada. Presented 6th April, 1910.—*Hon. Mr. Cloran*.. .. ..*Not printed.*

124. Return to an order of the House of Commons, dated 28th February, 1910, showing all sums of money received by the *Soleil* Publication Company, the *Vigie* Publication Company, and the *Daily Telegraph* Publication Company of Quebec, from the different federal departments, and from the Transcontinental Commission, since the first day of March, 1908, and the respective dates of each payment. Presented 3rd March, 1910.—*Mr. Paquet*.. .. ..*Not printed.*

125. Return to an order of the House of Commons, dated 29th November 1909, for a copy of all correspondence, reports, advertisements, tenders, contracts and other papers and documents relative to the maintenance of a wrecking plant on the Pacific or Atlantic coasts, or in the River or Gulf of St. Lawrence, not already brought down. Presented 3rd March, 1910.—*Mr. Taylor (Leeds)*.. .. ..*Not printed.*

126. Return to an order of the House of Commons, dated 19th January, 1910, showing how much money has been paid by this government in each year from 1896 to 1909, both years included, to the firms of Elliott Bros., and of R. Carson, of Kingston, Ontario, for supplies furnished to, or services of any kind performed by the government. Presented 4th March, 1910.—*Mr. Edwards*.. .. ..*Not printed.*

127. Return to an order of the House of Commons, dated 19th January, 1910, showing: 1. The amount of Canada's copper, silver, and gold coinage, respectively, for each of the last ten years, and the cost and profit of each year's coinage, counting the interest and depreciation of the cost of the Canadian Mint at 6 per cent, and the cost of maintenance and staff for the years during which it has been in operation. 2. The amount of United States silver, and at what cost that has been deported each year, and the estimated amount of United States silver current in Canada from year to year. Presented 4th March, 1910.—*Mr. Foster*.. .. ..*Not printed.*

CONTENTS OF VOLUME 19—*Continued.*

128. Return to an order of the House of Commons, dated 7th February, 1910, showing the number of chartered banks that have gone into liquidation since 1888, the date of the charters of each, the date of suspension, the capital stock, assets and liabilities, respectively, at date of supension, and the per cent of dividends paid to both holders and depositors respectively. Also what other banks have disappeared by amalgamation or otherwise, with similar information as above in respect to them. Presented 4th March, 1910.—*Mr. Foster*.. .. ..*Not printed.*

129. Return to an order of the House of Commons, dated 7th February, 1910, for a copy of all memorials, reports, correspondence and documents not already brought down, including report of the survey made during the past summer and autumn of the harbour at Cape John and Tatamagouche Bay, in the counties of Pictou and Colchester, in the province of Nova Scotia, relating to the route of the winter steamers between Prince Edward Island and the mainland of Canada, and suggesting and recommending a change or changes in the said route, and an increase in the number of trips daily of such winter steamers; and also a copy of all memorials, reports, correspondence and documents relating to the route of the summer mail steamers between Charlottetown and the mainland of Canada, and suggesting a change or changes in that route, and an increase in the number of trips daily of such summer mail steamers; and also with regard to connecting such suggested new summer route or routes with a point or points on the Intercolonial Railway; and also for a copy of all memorials, and correspondence, asking for additional and improved aids to navigation of the harbour of Charlottetown and in Tatamagouche Bay and harbour. Presented 4th March, 1910.—*Mr. Warburton*.. .. ..*Not printed.*

130. Return to an order of the House of Commons, dated 7th February, 1910, for a copy of all reports of surveys of any projected railway lines or routes in the province of Prince Edward Island during the years 1908 and 1909, and particularly reports of the surveys of any such line from Royal Junction, or thereabouts, to Kensington or thereabouts; also of all correspondence, recommendations, documents and papers of every kind, nature and description relating to or concerning the said projected railway lines or routes or the surveys therefor. Presented 6th March, 1910.—*Mr. Borden*..*Not printed.*

130*a*. Return to an order of the House of Commons, dated 14th March, 1910, for a copy of all memorials, reports of surveys, engineers' reports, estimates, correspondence and documents in the possession of the Department of Railways and Canals, and of the Intercolonial Railway Commission, relating to the survey and construction of a proposed branch of the Prince Edward Island Railway through New London and along the north shore of Queens County, in that island. Presented 8th April, 1910.—*Mr. Warburton.*
Not printed.

131. Return to an order of the Senate, dated 22nd February, 1910, for a comparative statement for the years 1907, 1908 and 1909, of crude petroleum oil imported into Canada, and values. Presented 4th March, 1910.—*Hon. Mr. Domville*.. .. ..*Not printed.*

132. Return to an order of the House of Commons, dated 28th February, 1910, for a copy of reports of the following Quarantine Frontier Inspectors:—Dr. Bradford, Dr. Carter, Dr. Duncan, Dr. Thornton, Dr. Wallace, Dr. May, Dr. McKenty, Dr. Little, Dr. Henderson and Dr. Scott. Presented 9th March, 1910.—*Mr. Sharpe (Lisgar)*..*Not printed.*

133. Report of the Hydrographic Survey, in connection with Irrigation, for the season of 1909. Pesented 10th March, 1910, by Hon. F. Oliver.
Printed for both distribution and sessional papers.

CONTENTS OF VOLUME 19—*Continued.*

134. Return to an order of the House of Commons, dated 17th February, 1909, showing particulars of the places where the expenditures mentioned in column 365, unrevised *Hansard*, for wharfs in Nova Scotia, New Brunswick and British Columbia, where made, together with amounts expended in each instance for construction and repairs, respectively. Presented 10th March, 1910.—*Mr. Barnard*.. .. ..*Not printed.*

135. Return to an address of the House of Commons, dated 16th November, 1909, for a copy of all petitions addressed to the government or any member thereof, as well as of all letters, correspondence and reports in the possession of the government, and having reference to repairs required at two wharfs built by the government and situated at Ste. Genevieve and Isle Bizard, in Jacques Cartier County, P.Q., and also all the correspondence concerning the construction of those wharfs, and of their use as piers for a bridge. Presented 11th March, 1910.—*Mr. Monk*.. .. ..*Not printed.*

136. Return to an order of the House of Commons, dated 17th January, 1910, showing the foreign exhibitions in which Canada has taken part since July, 1896, the time and place where such was held, the expenditure thereon by the government of Canada, the persons, not common labourers, who had charge of the same or were employed thereat, the sums paid to such severally under the heads of (*a*) salary, (*b*) expenses, and the total cost to the country of each such exhibition; also the amounts received as revenue from the sale of articles or commodities, lumber, buildings and other materials, respectively. The whole statement to be made up in tabular form and the additions of money columns to be made. Presented 11th March, 1910.—*Mr. Foster.*
Printed for sessional papers.

137. Return to an order of the Senate, dated 18th February, 1910, for a statement showing the number of homestead entries, pre-emptions, scrip locations and military warrant locations in townships 35, 36, 37, 38 and 39, in ranges 1 to 19, inclusive, of 4th meridian, and in townships 32, 33 and 34, in ranges 1 to 8 inclusive, west of 4th meridian. Presented 16th March, 1910.—*Hon. Mr. Talbot*.. .. ..*Not printed.*

138. Return to an order of the House of Commons, dated 19th January, 1910, for a copy of all correspondence between the government, or any member thereof, and the Imperial South African Service Association, or any of its officers, in reference to a proposed military reserve to be formed by the members of the Imperial South African Veterans' Association. Presented 17th March, 1910.—*Mr. Macdonald*.. ..*Not printed.*

139. Return to an address of the House of Commons, dated 14th February, 1910, for a copy of all orders in council, correspondence, reports, documents and papers, relating to the right or privilege to raise the waters of Clear Lake, province of Manitoba, application for which was made by a company to develop power on the Little Saskatchewan river. Presented 21st March, 1910.—*Mr. Roche*.. .. ..*Not printed.*

140. Return to an order of the House of Commons, dated 7th February, 1910, for a copy of all correspondence, advertisements, tenders and other documents, in connection with a proposal or proposals to lease a part or the whole of the Black Foot Reserve. Presented 21st March, 1910.—*Mr. Magrath*.. .. ..*Not printed.*

141. Return to an order of the House of Commons, dated 14th March, 1910, for a copy of all correspondence, reports, documents and papers relating to the strike of the employees of the Dominion Coal Company and the Cumberland Coal and Railway Company, in the counties of Cape Breton and Cumberland, Nova Scotia. Presented 23rd March, 1910.—*Mr. Rhodes*.. .. ..*Not printed.*

CONTENTS OF VOLUME 19—*Continued.*

141*a*. Supplementary Return to No. 141. Presented 13th April, 1910... .. .. ..*Not printed.*

142. Return to an order of the House of Commons, dated 24th November, 1909, showing the total amounts paid by the government in each year since 1896, for all printing, advertising and lithographing done outside of the Government Printing Bureau; the total amount so paid by each department of the government for such purposes during each year; the names and addresses of each individual, firm or corporation to whom any such moneys have been so paid, and the total amount paid to each individual, firm or corporation in each year since 1896. What portion of the said sums, if any, so paid since 1896, was expended after public advertisement, tender and contract, to whom such tenders were awarded, whether to the lowest tender in each case, what portion was expended otherwise than by public advertisement, tender and contract, and to whom it was paid in each instance. Presented 23rd March, 1910.—*Mr. Armstrong.*
Not printed.

143. Return to an order of the House of Commons, dated 19th January, 1910, showing: 1. How much money has been paid by this government from 1896 to the present time to the firm of Sullivan & Langdon, contractors, of Kingston, or to Mr. Sullivan, contractor, Kingston. 2. What public buildings or other public works that have been let by contract to either of the above firms since 1896, the contract price in each case, and the total amount paid to the said contractors in each case. 3 The total cost of each building or public work in which either of the above mentioned firms was interested. Presented 23rd March, 1910.—*Mr. Edwards*.. .. ..*Not printed.*

144. Return to an order of the House of Commons, dated 19th January, 1910, showing: 1. All amounts which may be deducted from the allowances due officers commanding corps of the active militia to cover deficiencies in clothing, &c., deposited to the credit of the Receiver General of Consolidated Revenue. 2. The amount of money that has been received from officers commanding corps of active militia during the five years ended 31st March, 1909, in payment for clothing issued to such corps, including deductions from allowances to cover repayment to replace deficiencies. Presented 30th March, 1910.—*Mr. Worthington*.. .. ..*Not printed.*

145. Rules of the Supreme Court of Saskatchewan, under the provisions of section 576 of the Criminal Code. Presented 30th March, 1910, by Hon. A. B. Aylesworth.
Not printed.

146. Copy of correspondence between the Canadian government and the government of Great Britain in respect to the purchase by Canada of the cruiser *Rainbow*. Presented 30th March, 1910, by Sir Wilfrid Laurier.. .. .. ..*Printed for sessional papers.*

146*a*. Copy of correspondence between the Canadian government and the government of Great Britain in respect to the purchase of the cruiser *Niobe*. Presented 30th March, 1910, by Sir Wilfrid Laurier.. .. ..*Printed for sessional papers.*

147. Return to an order of the House of Commons, dated 7th February, 1910, for a copy of all correspondence respecting the Central Park Post Office during the year 1909 and including particularly a copy of: 1. Representations made to the department that by changing the location of the office and establishing a post office at Collingwood East, the interest of the majority of the residents would be best served. 2. The evidence taken at the inquiry following such representations, and the official report upon such evidence. 3. Communications from residents of Central Park and others with respect to the closing of the post office there, and the answer made thereto in accordance with the facts. 4. The information upon which it was determined that the removal of the post office would be a greater convenience. 5. The largely signed petition from patrons

CONTENTS OF VOLUME 19—*Continued.*

of the Central Park Post Office complaining of the management, &c.; and the report of the inspector who investigated the same. Presented 31st March, 1910.—*Mr. Taylor (New Westminster)*.. .. ..*Not printed.*

148. Return to an order of the House of Commons, dated 14th March, 1910, showing, for the last two months, the time of each transmission of mails from Montreal to London, England, and from London, England, to Montreal and showing the date and hour of closing, and date and hour of delivery in each case. Presented 31st March, 1910.—*Mr. Monk*.. .. ..*Not printed*

149. Return to an order of the House of Commons, dated 14th March, 1910, showing the names of the sessional and temporary employees of the House of Commons who were under pay on the 27th January last; and the number of the said employees stated in the estimates of 1909-10. Presented 31st March, 1910.—*Mr. Best.*
Printed for sessional papers.

150. Return to an order of the House of Commons, dated 24th January, 1910, for a copy of all correspondence between Celstin Pregent, of Melocheville, P.Q., either personally or through his attorney, and the Department of Railways and Canals, concerning certain bridges on the Beauharnois canal. Presented 31st March, 1910.—*Mr. Monk.*
Not printed.

151. Return to an order of the House of Commons, dated 14th March, 1910, showing what amount of money has been paid each year to Geo. Walton, Manitoba, by the Interior Department, from January 1st, 1906, to December 31st, 1909; and what monies Mr. Geo. Walton has received since January 1st, 1909, from any other department of the government. Presented 4th April, 1910.—*Mr. Schaffner*.. .. ..*Not printed.*

152. Return to an order of the House of Commons, dated 7th February, 1910, for a copy of all correspondence relating to all coal lands reserved for as well as those acquired by the Bow River Collieries by direct application or assignment. Presented 4th April, 1910.—*Mr. Northrup*.. .. ..*Not printed.*

153. Report of Harry Freeman Alward, Commissioner appointed to investigate into the matter of complaints concerning James Dickson, government valuator, Trent canal, pursuant to Part II, of the Inquiries Act, Revised Statutes of Canada, 1906, held at Peterborough and Hastings, Ontario, March 25th to March 29th, inclusive, 1910; and also a copy of the evidence in relation thereto. Presented 5th April, 1910. by Hon. G. P. Graham.. .. ..*Not printed.*

154. Return to an order of the Senate, dated 14th January, 1910, for a statement comprising, in so many distinct columns, the names, dates and appointment, nature of employment, salary, travelling expenses, and indication of the section where the person was employed, of all persons in the service of the Commission for the construction of the Grand Trunk Pacific Railway between Moncton and Winnipeg. Presented 6th April, 1910.—*Hon. Mr. Bolduc*.. .. ..*Not printed.*

155. Return to an order of the House of Commons, dated 14th February, 1910, for a copy of all pay-sheets, accounts, and vouchers for wages, material and expenditure in connection with work on Skinner's Cove, Boat Harbour, Pictou County, Nova Scotia, in the years 1907, 1908 and 1909. Presented 8th April, 1910.—*Mr. Stanfield*..*Not printed.*

CONTENTS OF VOLUME 19—*Continued.*

155*a*. Return to an order of the House of Commons, dated 14th February, 1910, for a copy of all payments, accounts and vouchers for wages, materials and other expenditures in connection with work on the Toney river, Boat Harbour, Pictou County, Nova Scotia, in the years 1907, 1908 and 1909. Presented 8th April, 1910.—*Mr. Rhodes.*
Not printed.

156. Return to an order of the House of Commons, dated 15th December, 1909, showing: At what places in the several provinces armouries and drill halls have been erected, and when they were erected; the total cost of the site in each case, and when and from whom purchased; the contract price of each building, and to whom and when the contract was awarded; the total cost of each building; in what places armouries and drill halls are being constructed at present, and the cost of the site, from whom and when purchased; the estimated cost of the building in each case, and to whom, when and at what price the contract was awarded, and the names of places other armouries and drill halls are to be built by the government in the near future. Presented 8th April, 1910.—*Mr. Edwards*.. .. ..*Not printed.*

156*a*. Suplementary Return to No. 156. Presented 14th April, 1910.. .. ..*Not printed.*

157. Return to an order of the House of Commons, dated 28th February, 1910, for a copy of all correspondence, accounts, vouchers and reports, relating to the accident at Sault Ste. Marie lock in June, 1909; the number of vessels and tonnage with port of destination, and number of passengers passing through the Canadian lock at Sault Ste. Marie, during the months of April to December, both inclusive, 1909. Presented 8th April, 1910.—*Mr. Boyce*.. .. ..*Not printed.*

158. Return to an order of the House of Commons, dated 28th February, 1910, for a copy of the original field notes of the survey of Captain Jemmett, 1889, on Chu-Chu-Way-Ha Reserve, No. 2, Similkameen District, B.C. Presented 14th April, 1910.—*Mr. Burrell.*
Not printed.

159. Return to an order of the House of Commons, dated 14th February, 1910, for a copy of all pay sheets, accounts and vouchers for wages, materials and other expenditures in connection with work on the Causeway between Cariboo and Cariboo Island, Pictou County, Nova Scotia, in the years 1907, 1908 and 1909. Presented 14th April, 1910.—*Mr. Borden (Halifax)*.. .. ..*Not printed.*

160. Statement of representation made to the Honourable the Minister of Labour by interviews and in the form of correspondence in respect of Bill No. 101, 'An Act for the investigation of combines, monopolies, trusts and mergers which may enhance prices or restrict competition tothe detriment of consumers.' Presented 14th April, 1910, by Hon. W. L. M. King.. .. ..*Not printed.*

161. Return to an order of the House of Commons, dated 14th March, 1910, for a copy of all papers and correspondence relating to the sale and refund of the money paid on the sale of the n.e. ¼ section of section 11, township 1, range 9, west of the 1st meridian in Manitoba. Presented 15th April, 1910.—*Mr. Sharpe (Lisgar)*..*Not printed.*

162. Return to an order of the Senate, dated 7th April, 1910, for a copy of all correspondence or petitions received by the government from Manitoba grain growers in connection with terminal elevators, especially a letter dated the 31st January, 1910. Presented 14th April, 1910.—*Hon. Mr. Kirchhoffer*.. .. ..*Not printed.*

CONTENTS OF VOLUME 19—*Continued.*

163. Return to an address of the Senate, dated 11th March, 1910, for the production of the report of every inquiry made and of all correspondence exchanged during the last five years on the subject of one or more seizures of goods consigned to or the property of the Quebec Rock City Tobacco Company, as well as on the subject of every remission of fines incurred by the said company for infraction of the Inland Revenue laws or regulations. Presented 14th April, 1910—*Hon. Mr. Landry*.. .. ..*Not printed.*

164. Return to an order of the House of Commons, dated 7th February, 1910, showing the number of persons appointed as temporary employees of the civil service in the several departments since the present Civil Service Act came into force, the date of the appointment of each, their names, their salaries while employed as such temporary employees, the department in which such employee was placed, the duration of their employment, whether in one department alone or in case of transfer to another or other department, with total length of time employed, the names of those who in consquence of having passed the Civil Service examination have been employed permanently, the names of those who while temporarily employed failed to pass the required examination and are still employed in the service; the names of those who are or have been employed over the statutory six months as temporary employees, and the reasons for such continued employment in each case. Presented 18th April, 1910.—*Mr. Hughes.*
Not printed.

165. Return to an order of the House of Commons, dated 19th January, 1910, for a copy of all papers, letters, telegrams, documents and correspondence in connection with the establishment of the Experimental Farm near Lethbridge, Alta. Presented 18th April, 1910.—*Mr. Magrath*.. .. ..*Not printed.*

166. Certified copies of reports of the Committee of the Privy Council of 17th Januray, 1908, and of the 14th November, 1908, respecting a homestead entry granted to Mr. Charles D. T. Becher, for the n.e. ¼ of section 20, township 52, range 24, west of the fourth meridian, &c. Presented 18th April, 1910, by Hon. F. Oliver.. .. ..*Not printed.*

167. Return to an order of the Senate, dated 10th February, 1910, of all surveys, plans, reports and other documents connected with the improvement of the Saskatchewan river, with a view to facilitate transportation by water of passengers and freight from the foot of the Rocky Mountains to the city of Winnipeg, Man. Presented 19th April, 1910.—*Hon. Mr. Davis*.. .. ..*Not printed.*

168. Return to an order of the House of Commons. dated 24th November, 1909, for a copy of all correspondence and papers, and any information possessed by the government relating to the formation and work of the Secretariat decided upon by the Imperial Conference of 1907. Presented 20th April, 1910.—*Mr. Foster.*
Printed for both distribution and sessional papers.

169. Correspondence between the Clerk of the House and the Department of Justice with reference to the organization of the staff of the House of Commons. Presented 21st April, 1910, by Hon. W. S. Fielding.. .. ..*Not printed.*

170. Certified copy of a report of the Committee of the Privy Council, approved by His Excellency the Governor General on the 15th April, 1910, in respect to chapter 10 of the Statutes of Ontario, 1909, intituled: 'An Act to amend an Act to chapter 19 of the Statutes of Ontario, 1909,' intituled: 'An Act to amend an Act to provide for the transmission of Electrical Power to Municipalities,' to validate certain contracts entered into with the Hydro-Electric Power Commission of Ontario, and for other purposes.'. Presented 25th April, 1910, by Hon. A. B. Aylesworth.. .. .. ..*Not printed.*

CONTENTS OF VOLUME 19—*Continued.*

171. Return to an order of the House of Commons, dated 14th March, 1910, for a copy of all papers and correspondence between different persons or companies and the Department of Mines, in reference to a charge of unprofessional conduct made in the *Canadian Mining Journal* of July 1, 1909, against Mr. Fritz Cirkle, a mining engineer, temporarily employed by the Department of Mines in preparing a report on the asbestos mining industry of the province of Quebec. Presented 27th April, 1910.—*Mr. Smith (Nanaimo)*.. .. .. .

CONTENTS OF VOLUME 19—*Continued.*

178. Return to an order of the House of Commons, dated 28th February, 1910, for a copy of all reprsentations made by business or commercial men or citizens of Winnipeg to the department or government since the contemplated action of the government in reference to closing or keeping open the post office to box holders on Sundays, and who made them; and of all orders given by the Postmaster General or his department to the postmasters in reference to this Sunday closing. Presented 2nd May, 1910.—*Mr. Haggart (Winnipeg)*.. .. ..*Not printed.*

178*a*. Supplementary Return to No. 178. Presented 2nd May, 1910.. .. ..*Not printed.*

179. Return to an order of the House of Commons, dated 17th November, 1909, for a copy of all accounts, vouchers, correspondence, reports and other papers, not already brought down in connection with the survey of the St. John River channel between Fredericton and Woodstock, N.B. Presented 2nd May, 1910.—*Mr. Crocket*..*Not printed.*

180. Return to an address of the Senate, dated 17th March, 1910, for all documents, letters, returns, &c., concerning the damming of the river La DéCharge, near Lake St. John, in the district of Chicoutimi; which returns are to the effect of showing whether it would be possible to maintain the level of Lake St. John at a reasonable height in order to ensure serviceable navigation on that lake and its tributaries. Presented 2nd May, 1910.—*Hon. Mr. Choquette*.. .. ..*Not printed.*

181. Return to an address of the House of Commons, dated 14th February, 1910, for a copy of all orders in council, reports, correspondence, documents and papers not already brought down relating to the construction of the Georgian Bay canal, or any portion thereof, relating to the surveys thereof, and all offers, proposals and written negotiations not already brought down, with respect to the construction of the said canal or any portion thereof by any company, corporation or syndicate, or with respect to the guarantee by the government of bonds or debentures for the purpose of raising the necessary capital for the construction of the said canal. Presented 3rd May, 1910.—*Mr. White (Renfrew)*.. .. ..*Not printed.*

182. Return to an address of the House of Commons, dated 17th January, 1910, showing the various commissions appointed for all purposes by the government since July 1896, the person or persons composing the commission and the date of appointment, the purpose for which appointed, the date of completion of the work in each case, and the cost of each under the head (*a*) salary, (*b*) travelling expenses, and (*c*) printing report, if any; the word 'commissions' to include the missions of ministers, single or associated, going on public account to the countries outside of Canada. Presented 3rd May, 1910.—*Mr. Foster*.. .. ..*Not printed.*

182*a*. Supplementary Return to No. 182. Presented 3rd May, 1910.. .. ..*Not printed.*

183. Return to an order of the House of Commons, dated 28th February, 1910, showing the number of persons in the employ of each department of the government during the year 1909 under the following heads: (*a*) civil service employees at Ottawa; (*b*) civil service employees outside of Ottawa; (*c*) in stated and regular employ, but not under the Civil Service Act, giving the distinctive service of each group; (*d*) those in temporary or casual employment, giving the distinctive work of each group, and also showing the total amount paid under each head. Presented 3rd May, 1910.—*Hon. Mr. Foster*.. .. ..*Not printed.*

184. Return to an order of the Senate, dated 2nd May, 1910, showing for each of the last ten years the date of the prorogation of parliament and the date on which the bound statutes of the session were distributed. Presented 4th May, 1910.—*Hon. Mr. Power.* *Not printed.*

DEPARTMENT OF RAILWAYS AND CANALS

CANAL STATISTICS

FOR THE

SEASON OF NAVIGATION

1908

PRINTED BY ORDER OF PARLIAMENT

OTTAWA
PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1909

[No. 20*a*—1910]

To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, in the County of Northumberland, in the Peerage of the United Kingdom, and a Baronet; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, &c., &c., &c., Governor General of Canada.

May it Please Your Excellency,—

The undersigned has the honour to present to Your Excellency the report on Canal Statistics for the year ended December 31, 1908.

GEO. P. GRAHAM,
Minister of Railways and Canals.

To the Honourable GEORGE P. GRAHAM,
Minister of Railways and Canals.

SIR,—I have the honour to submit the annual report of the Controller of Railway Statistics in relation to the operations of the Canals of the Dominion for the year ended December 31, 1908.

I have the honour to be, Sir,

Your obedient servant,

M. J. BUTLER,
Deputy Minister of Railways and Canals.

OFFICE OF THE COMPTROLLER OF STATISTICS,
OTTAWA, 20th March, 1909.

M. J. BUTLER, ESQ.,
Deputy Minister of Railways and Canals.

SIR,—I have the honour to submit to you herewith Canal Statistics for the year ended 31st December, 1908.

It has been possible to prepare this report earlier than in preceding years, because of changes in the method of tabulation.

Freight carried through the canals of the Dominion during the year 1908 aggregated 17,502,820 tons—a reduction of 3,040,819 as compared with 1907. Nevertheless, the volume of traffic was largely in excess of the record for all years anterior to 1907. The facts relating to the last ten years are as follows :—

1899	6,225,924 tons.
1900	5,013,693 "
1901	5,665,259 "
1902	7,513,197 "
1903	9,203,817 "
1904	8,256,236 "
1905	9,371,744 "
1906	10,523,185 "
1907	20,543,639 "
1908	17,502,820 "

The decline for the year 1908 was made up of 2,568,658 tons in east-bound and 472,161 in west-bound traffic. This falling off, however, related almost wholly to United States business passing through the canals of Canada, as the following statements show :—

		1907.	1908.
Canadian to Canadian ports	up	1,034,733	1,028,246
" " "	down	3,162,158	3,292,422
" United States ports	up	891,692	560,736
" " "	down	226,138	278,721
United States to " "	up	1,991,959	1,704,310
" " "	down	11,060,878	8,218,866
" " Canadian "	up	819,369	972,300
" " " "	down	1,356,712	1,447,219

Thus it will be seen that while there was a decrease of 3,129,661 tons in the traffic between United States ports, there was an actual increase of 88,842 tons in the business affecting Canadian ports.

The falling off in tonnage related very largely to iron ore, of which 10,105,016 tons passed through the canals—chiefly the Sault Ste. Marie—in 1907 and 7,402,672 in 1908. Of wheat, 3,199,031 tons were reported in 1908 as compared with 2,473,202 in 1907. Oats and barley showed increases, while there was a decline in the quantity of flour transported by water. An analysis of the traffic by commodities is given in a table on a succeeding page.

It is also gratifying to observe that the tonnage of Canadian vessels passing through the canals showed an increase for 1908 of 451,878 tons over the preceding year.

A distinct and valuable feature of novelty in the statistics for 1908 has reference to the country in which the cargo originated. Prior to last year no record had been kept of this important data. There was no discrimination between the products of Canada and those of the United States carried through the canals. In future, however, it will be possible to trace the movement of the commodities of both countries through Canadian channels at least.

For 1908 the origin of cargoes was as follows :—

Canal.	United States. Tons.	Canada. Tons.
Welland	927,208	776,245
St. Lawrence	747,451	1,261,651
Chambly	123,602	379,674
Ottawa	....	258,527
Rideau	12,121	77,519
St. Peters	.....	72,015
Trent Valley	.....	81,690
Murray	13,306	12,595
Sault Ste. Marie	10,666,985	2,092,231
Total	12,490,683	5,012,147

Changes have been made this year in the arrangement of the tables, which it is hoped will bring them under the eye in more convenient form than they have appeared hitherto.

The following summaries and digests of statistical data have been brought down to the close of 1908 :—

STATEMENT of total Freight passed through the Canals for the following years :—

Years.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up and down.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.			
1887	336,648	1,154,424	138,692	202,563	151,805	192,528	86,374	457,482	713,519	2,006,997	2,720,516
1888	355,165	1,146,260	138,127	174,239	214,407	223,429	81,611	428,357	789,310	1,972,287	2,761,597
1889	384,777	1,156,306	122,295	198,497	267,224	300,193	81,243	603,311	855,529	2,258,367	3,113,896
1890	369,593	1,137,011	144,368	133,188	216,813	320,324	58,709	533,021	789,505	2,123,542	2,913,047
1891	370,120	1,155,247	103,814	123,193	248,188	307,958	50,747	543,259	772,869	2,129,657	2,902,526
1892	327,560	1,322,137	173,538	135,787	241,034	302,983	47,396	481,301	789,528	2,242,208	3,031,736
1893	351,706	1,344,822	214,076	141,602	247,329	385,769	54,912	806,773	868,023	2,678,966	3,546,989
1894	299,155	1,140,606	204,175	89,614	231,172	363,107	46,020	568,866	780,522	2,162,193	2,942,715
1895	264,824	1,070,046	286,191	91,177	362,637	608,778	62,285	590,140	975,937	2,360,141	*3,336,078
1896	293,353	1,619,668	259,659	100,519	1,197,245	3,536,054	117,535	867,040	1,867,792	6,123,281	7,991,073
1897	275,587	1,713,274	268,700	187,960	669,142	4,369,314	108,787	968,203	1,322,216	7,238,751	8,560,967
1898	263,989	1,819,887	187,253	98,967	829,508	2,425,121	81,615	912,135	1,362,365	5,256,110	6,618,475
1899	296,208	1,833,412	266,364	115,133	732,030	2,129,988	125,678	727,111	1,420,280	4,805,644	6,225,924
1900	312,201	1,632,915	270,033	81,714	568,197	1,339,915	105,155	703,563	1,255,586	3,758,107	5,013,693
1901	340,805	1,686,094	268,449	201,231	507,204	1,801,696	177,715	682,065	1,294,173	4,371,086	5,665,259
1902	529,085	2,064,480	308,212	342,484	515,828	3,000,636	190,243	562,229	1,543,368	5,969,829	7,513,197
1903	648,150	2,391,366	430,174	408,560	863,337	3,130,816	373,456	958,018	2,315,117	6,888,709	9,203,817
1904	606,737	2,047,499	511,887	276,578	699,784	2,778,903	483,795	851,053	2,302,203	5,954,033	8,256,236
1905	736,976	2,252,514	549,365	347,089	607,228	3,183,895	577,528	1,137,146	2,451,097	6,920,647	9,371,744
1906	1,238,929	2,355,855	627,094	234,919	991,508	3,595,256	482,239	997,385	3,339,770	7,183,415	10,523,185
1907	1,034,733	3,162,158	891,692	226,138	1,991,959	11,060,878	819,369	1,356,712	4,737,753	15,805,886	20,543,639
1908	1,028,246	3,292,422	560,736	278,721	1,704,310	8,218,866	972,300	1,447,219	4,265,592	13,237,228	17,502,820

*Sault Ste. Marie canal opened in August, 1895.

STATEMENT of the Tonnage of Canadian and United States Vessels for the following years :—

CANADIAN VESSELS.

Years.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Number of Vessels.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up & Down.	
1887.....	1,201,529	1,194,665	162,554	36,277	1,071	65	30,778	221,013	1,395,932	1,452,020	2,847,952	18,991
1888.....	1,113,290	1,120,774	158,209	34,368	1,252	.....	22,553	189,876	1,295,304	1,345,018	2,640,322	17,661
1889.....	1,285,574	1,207,892	188,131	39,371	976	802	20,271	252,565	1,494,952	1,500,630	2,995,582	19,393
1890.....	1,314,127	1,250,999	229,478	32,909	929	351	14,003	296,676	1,558,537	1,580,935	3,139,472	20,655
1891.....	1,356,518	1,287,168	201,758	28,642	550	292	16,350	244,176	1,575,176	1,560,278	3,135,454	19,246
1892.....	1,517,249	1,460,505	177,136	29,184	1,466	394	14,659	261,374	1,710,510	1,691,455	3,401,965	21,177
1893.....	1,548,094	1,422,326	170,186	26,787	1,172	10	17,037	248,442	1,736,489	1,697,565	3,434,054	20,757
1894.....	1,319,792	1,260,907	217,635	19,298	2,177	5	6,394	222,696	1,545,998	1,502,906	3,048,904	19,027
1895.....	1,258,848	1,165,683	253,693	13,383	.....	.....	5,899	285,553	1,518,440	1,464,619	2,983,059	17,136
1896.....	1,547,757	1,420,342	200,292	5,234	157	....	4,115	271,809	1,752,321	1,697,385	3,449,706	20,972
1897.....	1,629,192	1,482,951	215,785	11,378	....	....	3,533	297,898	1,848,510	1,792,227	3,640,737	21,466
1898.....	1,704,661	1,609,255	215,393	4,927	499	518	6,805	255,927	1,927,358	1,870,627	3,797,985	21,509
1899.....	1,865,643	1,774,789	242,817	32,436	925	3,691	42,290	345,980	2,151,675	2,156,896	4,308,571	23,579
1900.....	1,767,293	1,681,340	265,926	14,922	2,909	64	38,015	358,781	2,074,143	2,055,107	4,129,250	21,755
1901.....	1,615,952	1,587,221	279,007	82,541	3,300	2,908	97,332	312,003	1,995,591	1,984,673	3,980,264	20,860
1902.....	1,914,167	1,840,787	241,356	97,492	1,874	2,164	101,335	286,520	2,258,732	2,226,963	4,485,695	22,198
1903.....	2,061,258	2,088,969	340,383	143,614	7,018	3,082	188,896	379,612	2,597,555	2,615,277	5,212,832	23,767
1904.....	1,838,260	1,907,886	299,245	159,740	5,175	4,223	237,910	319,661	2,380,590	2,391,510	4,772,100	21,851
1905.....	2,059,097	2,031,766	312,773	188,138	11,820	3,191	262,401	322,005	2,646,091	2,545,100	5,191,191	23,726
1906.....	2,271,776	2,264,476	292,705	155,595	24,420	5,506	202,276	309,567	2,791,177	2,735,144	5,526,321	25,498
1907.....	2,561,948	2,661,317	337,822	129,246	9,153	7,331	238,172	383,922	3,147,095	3,181,816	6,328,911	28,833
1908.....	2,726,776	2,748,139	318,327	227,315	5,057	7,844	348,944	398,387	3,399,104	3,381,685	6,780,789	29,040

STATEMENT of the Tonnage of Canadian and United States Vessels, for the following years :—

UNITED STATES VESSELS.

YEARS.	FROM CANADIAN TO CANADIAN PORTS.		FROM CANADIAN TO UNITED STATES PORTS.		FROM UNITED STATES TO UNITED STATES PORTS.		FROM UNITED STATES TO CANADIAN PORTS.		TONS.		TOTAL TONS.	Number of Vessels.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up & Down.	
1887.....	16,265	17,925	38,857	56,708	143,730	140,562	52,793	98,840	251,645	315,035	566,680	3,883
1888.....	14,304	26,801	42,425	50,047	177,714	156,095	49,778	114,613	284,221	347,556	631,777	3,921
1889....	21,125	26,449	55,996	50,732	253,088	206,567	56,249	160,442	386,458	444,190	830,648	4,542
1890.....	10,390	16,345	38,156	36,397	248,418	234,728	39,697	97,266	336,661	384,736	721,397	3,364
1891.....	10,357	29,851	70,665	27,727	283,013	238,818	31,083	146,602	395,118	442,998	838,116	3,602
1892.....	12,023	29,405	88,221	22,763	280,315	229,437	37,037	172,594	417,596	454,199	871,795	3,928
1893.....	10,752	34,303	214,047	33,741	351,994	282,724	50,994	307,740	627,787	658,508	1,286,295	4,585
1894.....	18,528	30,201	139,720	20,830	302,562	269,788	37,406	192,992	498,216	513,811	1,012,027	4,131
1895.....	8,838	24,768	138,554	17,712	262,240	216,542	32,295	185,730	441,927	444,752	886,679	4,427
1896.....	11,496	19,093	195,228	21,953	357,205	292,359	40,416	290,370	604,345	623,775	1,228,120	4,650
1897.....	14,666	18,367	269,430	17,618	338,938	277,345	26,341	347,698	649,375	661,028	1,310,403	4,675
1898.....	12,142	9,541	233,524	32,880	308,878	305,464	32,331	336,004	586,875	683,889	1,270,764	4,264
1899.....	17,217	18,044	172,897	30,002	1,605,887	1,156,503	51,902	234,336	1,846,848	1,438,885	3,285,733	6,101
1900.....	13,316	17,824	157,689	30,443	1,208,725	744,276	45,741	190,971	1,425,471	983,514	2,408,985	5,502
1901.....	11,587	18,706	177,169	28,124	922,464	1,044,707	54,895	224,622	1,166,115	1,316,159	2,482,274	5,634
1902.....	13,622	37,871	187,826	70,641	1,756,948	1,654,672	123,257	241,602	2,081,653	2,004,786	4,086,439	6,433
1903.....	14,014	24,168	265,208	65,247	1,736,187	1,689,414	106,401	335,836	2,121,810	2,114,665	4,236,475	6,695
1904.....	10,122	16,890	275,721	39,993	1,464,316	1,475,085	68,081	305,697	1,818,240	1,837,665	3,655,905	6,253
1905.....	19,743	19,444	364,985	81,876	2,350,494	1,701,704	101,536	456,459	2,836,758	2,259,483	5,096,241	7,085
1906.....	34,306	15,324	356,259	78,561	2,738,623	1,928,131	115,675	418,436	3,244,863	2,440,452	5,685,315	7,319
1907.....	57,349	72,018	304,591	72,048	4,730,053	5,376,060	205,769	623,941	5,463,767	6,141,067	11,604,834	9,328
1908.....	54,587	32,705	442,773	124,120	2,975,624	4,142,392	218,835	536,103	3,685,819	4,835,320	8,521,139	7,489

Tonnage of Articles carried through Canadian Canals, from 1889 to 1908.

Articles.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.
1. Bricks	10,299	12,359	14,273	12,001	14,727	10,725	9,122	10,855	10,903	9,873
2. Cement	6,432	3,164	5,406	4,822	10,754	10,591	9,652	7,829	12,820	19,351
3. Iron (all kinds)	44,186	39,798	22,167	17,986	30,197	25,837	28,471	30,334	41,949	26,979
4. Steel	10,056	198	7,067	3,606	1,258	1,565	2,759	13,716	6,854	9,387
5. Stone for cutting	19,930	13,891	13,750	3,972	357	166	1,243	1,355	1,713	2,785
6. Apples	3,695	4,329	7,566	7,190	3,929	5,160	3,473	16,716	5,204	3,412
7. Barley	8,821	14,185	27,840	16,504	20,700	29,358	10,186	15,328	19,168	15,510
8. Corn	356,446	344,261	197,604	196,913	450,330	174,279	173,269	339,092	395,753	624,854
9. Flour	11,416	20,706	20,684	25,746	26,136	43,751	50,343	49,576	15,930	34,061
10. Hay pressed	3,617	3,623	5,648	5,867	12,100	18,090	22,121	10,973	5,990	5,880
11. Meals (all kind)	20,313	22,211	27,021	33,097	37,272	61,426	48,008	47,889	44,014	25,580
12. Oats	31,977	33,857	64,300	90,682	53,620	30,957	20,158	650 48,962	82,527	75,079
13. Potatoes	632	880	814	950	417	252	232	394	1,528	1,820
14. Seeds	10,804	2,273	10,273	5,776	6,193	4,612	182	5,645	1,576	5,783
15. Agric. Products Vegetables	21,901	10,700	8,321	15,669	10,589	1,484	5,811	6,945	1,751	3,320
16. Cattle	950	1,303	1,220	879	788	808	723	877	1,199	1,515
17. Horses	610	728	693	844	773	774	2,568	931	878	1,064
18. Pork	1,971	1,190	1,152	870	608	1,331	811	1,177	945	3,412
19 Sheep	542	653	699	663	528	675	793	613	646	451
20. Marble	4,502	4,476	3,590	3,214	2,168	853	898	32	534	208
21. Sugar	9,160	8,624	4,112	9,886	13,246	31,586	16,050	23,737	14,243	17,401
22. Whisky	1,416	1,580	1,681	1,335	1,050	1,183	1,498	850	1,054	1,029
23. Firewood	100,636	109,785	115,089	169,971	220,516	177,905	202,938	218,204	271,112	187,216
24. Lumber sawn	899,209	745,929	673,020	760,251	671,926	642,742	587,226	600,580	595,522	593,261
25. Railway ties	16,022	10,799	10,165	12,589	9,418	3,926	6,383	4,440	9,558	6,467
26. Square timber	79,791	74,895	25,301	48,983	47,871	48,359	64,875	57,618	86,104	50,844
27. Saw logs	36,927	27,093	36,367	44,156	33,137	29,299	29,075	28,220	40,313	23,887
28. Coal	553,868	470,808	511,729	517,261	537,279	517,532	466,234	534,400	379,111	480,316
29. Iron ore	2,433	5,367	3	Nil.	Nil.	Nil.	60	490	Nil.	13,433
30. Timber and other woods free	69,286	72,075	69,247	47,565	66,673	53,221	59,169	45,027	68,017	28,952
31. *Wheat, Corn, Flour, Iron, Salt, Coal	424,915	362,072	403,045	380,934	663,013	408,781	381,518	593,272	695,086	652,349
32. Wheat	185,180	143,952	230,840	301,486	285,799	279,720	209,984	335,469	370,167	299,055

* These articles were free, going westward, in the years when tolls were charged, and appear in this grouped form in the Statistics of the Department.

Tonnage of Articles carried through Canadian Canals from 1889 to 1908.—*Concluded.*

Articles.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.
1. Bricks	11,075	18,343	18,697	17,884	11,086	9,097	23,814	17,713	20,953	15,769
2. Cement	6,938	10,628	20,079	22,614	28,600	25,539	31,942	45,619	78,347	49,577
3. Iron (all kinds)	27,158	46,153	79,415	118,916	135,160	123,121	145,260	218,801	226,674	185,259
4. Steel	17,684	8,861	4,043	2,104	8,514	4,300	5,661	4,632	22,740	82,902
5. Stone for cutting	5,364	2,432	2,539	3,228	4,961	576	23,511	31,937	35,969	77,094
6. Apples	4,480	6,182	1,973	7,695	13,480	11,865	9,217	8,046	8,258	.....
7. Barley	28,353	26,754	27,699	38,137	51,003	75,538	114,226	123,950	154,986	174,628
8. Corn	399,915	348,493	185,893	81,645	338,132	189,739	257,387	244,122	410,671	153,713
9. Flour	39,618	97,545	171,400	357,104	359,848	260,630	243,938	297,937	378,644	228,605
10. Hay pressed	15,492	25,998	38,277	41,537	50,129	32,576	33,354	26,811	25,121	18,259
11. Meals (all kind)	21,310	17,175	15,812	29,321	29,989	24,174	14,814	27,472	49,612	28,100
12. Oats	65,495	96,062	72,978	46,717	66,621	72,723	101,258	209,286	343,984	460,397
13. Potatoes	2,528	3,505	4,409	4,802	6,804	5,351	7,420	5,853	6,535	6,858
14. Seeds	7,345	3,308	4,602	8,303	6,828	5,477	3,727	1,455	255,679	.....
15. Agric. Products Vegetables	2,952	1,909	2,663	9,178	3,219	2,688	6,470	4,805	10,978	25,838
16. Cattle	1,299	972	1,386	1,538	1,236	1,766	1,468	932	552	628
17. Horses	1,049	869	1,192	1,258	1,544	1,605	1,346	1,685	784	701
18. Pork	2,317	1,074	1,720	1,740	1,483	1,337	1,213	834	1,185	2,273
19. Sheep	535	504	557	743	302	605	616	514	332	209
20. Marble	2,428	3,906	2,223	1,262	1,521	22	2,475	2,575	2,406	.....
21. Sugar	20,238	20,313	11,890	14,353	8,190	9,203	27,275	42,801	62,634	.....
22. Whisky	1,504	1,595	1,572	2,876	5,000	5,396	6,680	9,970	10,682	10,193
23. Firewood and Pulpwood	212,076	227,108	217,105	307,172	320,765	440,254	423,693	468,133	59,999	467,306
24. Lumber sawn	597,109	521,282	472,954	557,607	583,522	476,436	591,028	645,257	533,294	417,229
25. Railway ties	16,423	7,587	12,508	7,653	4,603	3,788	7,470	5,608	3,371	2,598
26. Square timber	26,288	25,943	32,293	26,281	32,286	43,557	13,215	18,585	37,124	53,072
27. Saw logs	13,919	34,684	19,073	24,144	20,540	26,630	58,949	90,929	35,628	18,056
28. Coal	468,912	1,028,113	1,033,762	782,053	1,590,595	1,570,113	1,596,935	1,804,974	3,546,683	3,528,109
29. Iron ore	26,420	1,058,052	1,712,320	2,556,279	2,703,827	2,482,181	2,959,300	2,970,637	10,105,016	7,402,672
30. Timber and other woods	32,624	38,296	48,666	68,615	68,487	64,808	68,629	70,015	.....	29,170
*Wheat, Corn, Flour, Iron, Salt, 31. Coal	454,895	352,499	280,902	395,078	558,897	427,614	553,866	709,320	.....	.....
32. Wheat	329,086	293,638	669,557	1,309,218	1,433,288	1,202,716	1,248,567	1,406,741	2,473,202	3,199,031
33. Other articles	.....	.....	.....	.....	.....	.....	.....	.....	.....	866,574

* Wheat, corn, flour, iron, salt and coal form grouped item No. 31, although the same commodities appear separately in the list. This was because they were free in the years when tolls were collected. Tolls having been abolished this item hereafter will not appear in the statistical tables in the above form. Item 12 includes flaxseed.

THE STATEMENT following brings the capital expenditure on the Canals of the Dominion down to 31st March, 1908. It must be understood, however, that the total shown is apart from the outlay by the Imperial Government on the Carillon and Grenville Canal, as to which the records were lost in the destruction by fire of the Ordnance Office, Montreal, in 1852. The details are as follows :—

Canal.	Construction.	Enlargement.	Total.
	$ cts.	$ cts.	$ cts.
St. Peter's	648,547 14		648,547 14
Lachine	2,589,532 85	9,211,525 18	11,801,058 03
Beauharnois	1,636,690 26		1,636,690 26
St. Lawrence River and Canals	18,442 85	3,346,874 72	3,365,317 57
Lake St. Louis		298,176 11	298,176 11
Lake St. Francis		75,906 71	75,906 71
Cornwall	1,945,624 73	5,288,557 87	7,234,182 60
Williamsburg — Farrans Point		877,090 57	10,473,624 10
Williamsburg — Galops		6,106,939 73	
Williamsburg — Rapide Plat		2,158,242 00	
Williamsburg — Williamsburg	1,320,655 54	10,696 26	
Welland	7,693,824 03	20,388,805 83	28,082,629 86
Ste. Anne's	134,456 51	1,035,759 12	1,170,215 63
Carillon and Grenville	63,053 64	4,119,039 32	4,182,092 96
Culbute	382,776 46		382,776 46
Rideau	4,085,889 21		4,085,889 21
St. Ours	121,537 65		121,537 65
Chambly	637,214 66		637,214 66
Murray	1,248,820 26		1,248,820 26
Trent	5,773,664 71		5,773,664 71
Fay	489,599 23		489,599 23
Sault Ste. Marie	4,779,613 84		4,779,613 84
Soulanges	6,955,317 59		6,955,317 59
	40,525,261 16	52,917,613 42	93,442,874 58

Alterations have been made in the form of ship's report, looking to a better and more comprehensive classification of commodities than hitherto been provided.

Details of tonnage by canals and commercial articles will be found in the tables subjoined.

I have the honour to be, Sir,

Your obedient servant,

J. L. PAYNE,
Comptroller of Statistics.

CANAL STATISTICS FOR SEASON OF NAVIGATION, 1908

GRAIN PASSED DOWN WELLAND.

The quantity of barley, corn, oats, pease, rye and wheat passed down the Welland Canal, from ports west of Port Colborne for a period of twenty-seven years is as follows:—

	Quantity passed down to Montreal.	To Ports in Ontario.	Quantity from U.S. Ports to U.S. Ports.
	Tons.	Tons.	Tons.
1882	180,694		63,881
1883	186,814	10,650	121,876
1884	142,194	12,153	104,537
1885	96,569	11,909	117,346
1886	203,940	9,881	151,551
1887	185,034	11,838	134,868
1888	160,358	25,599	169,664
1889	267,769	19,075	213,766
1890	288,513	16,899	245,932
1891	295,509	6,805	202,710
1892	261,954	8,942	201,540
1893	501,806	25,555	222,958
1894	273,651	16,699	203,979
1895	231,491	32,096	133,823
1896	461,049	73,386	160,372
1897	560,254 *	53,257	157,756
1898	519,532	31,279	144,612
1899	332,746	40,197	68,011
1900	244,661	17,525	84,589
1901	151,566	13,732	83,370
1902	208,215	22,787	81,164
1903	351,936	29,062	111,828
1904	198,246	23,711	102,523
1905	341,431	42,061	129,270
1906	404,935	33,351	176,119
1907	635,573	42,032	163,295
1908	756,141	38,142	135,172

* Of the quantity of grain passed down to Montreal there were transhipped at Ogdensburg, in 1891, 17,817 tons; in 1892, 4,341 tons; in 1893, 71,445 tons; in 1894, 23,030 tons; in 1895, 18,987 tons; in 1896, 77,355 tons; in 1897, 89,659 tons; in 1898, 40,257 tons; in 1899, 48,828 tons; in 1900, 38,403 tons; in 1901, 17,387 tons; in 1902, 34,060 tons; in 1903, 40,641 tons; none in 1904, 1905 ,1906, 1907 nor 1908.

During the last decade the quantity of agricultural products as above, passed down the Welland and St. Lawrence Canals to Montreal, has increased from 332,746 tons in 1899 to 756,141 tons in 1908, and the quantity passed down the Welland Canal from United States ports to United States, has increased from 68,011 to 135,172 tons for the same years.

The quantity of barley, buckwheat, corn, oats, pease, rye and wheat, arrived at Montreal via Grand Trunk and Canadian Pacific Railways for a period of 13 years, is reported as ollows :—

		Tons.
Pour	1896	153,717
	1897	228,611
	1898	293,391
	1899	209,170
	1900	229,624
	1901	227,700
	1902	263,861
	1903	253,959
	1904	154,625
	1905	148,377
	1906	386,963
	1907	383,735
	1908	285,262

The quantity of the same articles passed down the whole length of the St. Lawrence Canals to Montreal for the same period was :—

		Tons.
Pour	1896	495,898
	1897	604,200
	1898	575,097
	1899	372,291
	1900	295,928
	1901	203,316
	1902	242,225
	1903	400,057
	1904	220,076
	1905	375,630
	1906	449,673
	1907	684,697
	1908	776,374

Comparative shipments of grain by the St. Lawrence route, and rail and water via the State of New York, are as follows :

QUANTITY OF GRAIN TO SEA BOARD BY COMPETING ROUTES,

The quantity of grain and pease passed down the whole length of the St. Lawrence canal to Montreal, is as follows :—

		Tons.
For	1907	635,573
	1908	756,141
	Showing an increase of	120,568

The quantity of grain and pease carried to Montreal via Canadian Pacific and Grand Trunk Railways, is reported as follows :—

		Tons.
For	1907	383,735
	1908	285,262
	Showing a decrease of	98,473

The quantity of grain arrived at the tide-water by New York canals, is reported as follows:—

	Tons.
For 1907	239,844
1908	183,927
Showing a decrease of	55,917

The quantity of grain carried to tide-water by the New York railways, is reported as follows:—

	Tons.
For 1907	8,579,555
1908	7,900,862
Showing a decrease of	678,693

The increases and decreases for 1908 as compared with 1907 on the several routes competing for the carrying trade to the sea board are as follows:—

—	Increase.	Decrease.	Increase.	Decrease.
	Tons.	Tons.	Per cent.	Per cent.
On the St. Lawrence	120,568			
" Canadian Pacific and Grand Trunk Railways				
" New York Canals		55,917		
" " Railways		678,693		

By reference to Appendix U, it will be seen that the quantity of freight from ports west of Port Colborne to the United States ports, Oswego, Ogdensburg, &c., has decreased from 285,963 tons in 1897 to 227,047 tons in 1908, and the quantity to Ontario ports between Port Dalhousie and Cornwall, and an increase from 166,626 tons in 1897 to 200,520 tons in 1908. The quantity passed down to Montreal shows an increase from 581,047 tons in 1897 to 864,926 tons in 1908.

TRANSHIPMENT OF GRAIN.

The quantity of grain passed down the Welland Canal in Canadian and United States vessels to Kingston and Prescott for fifteen years, is as follows:—

In Canadian vessels there were in—

			Tons.
1894,	125	cargoes, with an aggregate quantity of	159,145
1895,	123	" "	136,617
1896,	196	" "	227,912
1897,	180	" "	229,265
1898,	166	" "	224,021
1899,	162	" "	221,306
1900,	325	" "	183,200
1901,	112	" "	132,558
1902,	131	" "	175,514
1903,	170	" "	218,840
1904,	115	" "	174,121
1905,	167	" "	239,418
1906,	205	" "	344,605
1907,	255	" "	427,813
1908,	355	" "	598,941

In the United States vessels there were in—

			Tons.
1894,	84	cargoes, with an aggregate quantity of	106,236
1895,	56	" "	73,987
1896,	158	" "	217,978
1897,	197	" "	285,847
1898,	339	" "	464,852
1899,	167	" "	205,571
1900,	259	" "	163,575
1901,	135	" "	123,229
1902,	135	" "	136,652
1903,	219	" "	273,986
1904,	118	" "	150,359
1905,	235	" "	273,344
1906,	178	" "	269,800
1907,	263	" "	413,087
1908,	271	" "	330,514

One hundred and sixty-two Canadian and 49 American vessels took cargoes of 343,733 tons through to Montreal intact in 1908; 87 Canadian and 9 American of 135,582 in 1907; 74 Canadian and 10 American of 108,734 tons in 1906; 96 Canadian and 18 American of 180,206 in 1905; 56 Canadian and 16 American of 116,095 tons in 1904; 56 Canadian and 18 American of 99,582 tons in 1903; 19 Canadian and 17 American of 34,804 tons in 1902; 23 Canadian and 2 American of 17,303 tons in 1901, 15 of 7,924 tons in 1900, 2 of 558 tons in 1899, 7 of 2,426 in 1898, 7 of 2,324 in 1897, 3 of 1,176 in 1896, 4 of 1,344 tons in 1905, 2 cargoes of 810 tons in 1894, none in 1893, 2 in 1892 of 924 tons, and 3 in 1891 of 1,441 tons. Three vessels lightened a portion of their cargoes in 1901, 9 in 1900, 11 in 1899, 25 in 1898, 11 in 1897, 16 in 1896, 6 in 1895, 19 in 1894, 34 in 1893, 25 in 1892, and 44 in 1891; 222 vessels discharged the whole of their cargoes at Kingston in 1901, 540 in 1900, 316 in 1899, 473 in 1898, 359 in 1897, 335 in 1896, 169 in 1895, 188 in 1894, 369 in 1893, 220 in 1892, and 293 in 1891.

The quantity of grain transhipped at Port Colborne in 1908 and the four previous years is given below.

The total number of grain-laden vessels lightened at this port in 1908 was 69, against 93 the previous year.

The quantity of grain lightened was as follows :—

Articles.	1904.	1905.	1906.	1907.	1908.
	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat	175,117	679,840	1,009,474	1,428,300	1,106,244
Corn	408,976	104,027	110,629	112,036	.....
Rye	.....	.....	.....	.....	.....
Oats	15,353	.....	29,118	30,824	23,945
Barley	9,686	.....	2,103	.....	56,544
Flax Seed	.....	.....	.....	39,040	49,628

The quantity of wheat discharged at Port Colborne in 1908 and two previous years from vessels which did not enter the canal, is as follows :

1906.	1907.	1908.
Bush.	Bush.	Bush.
383,437	74,014	715,347

WELLAND CANAL.

The total quantity of freight passed on the Welland Canal during the season of 1908 was 1,703,453 tons ; of this quantity 8,024 were way or local freight.

There were 1,292,493 tons of freight passed eastward, and 410,960 passed westward.

East and West bound Through Freight.

The total quantity of through freight passed through the whole length of the Welland Canal during the season of 1908 was 1,695,429 tons.

Of this quantity 1,285,229 tons were east bound and 410,200 west bouud freight.

Of the east bound through freight, Canadian vessels carried 767,118 tons and United States vessels carried 518,111 tons; and of the west bound through freight Canadian vessels carried 154,203 tons and United States vessels carried 255,997 tons, or a total of 921,321 tons for Canadian and 774,108 tons for American vessels.

ST. LAWRENCE CANALS.

The total quantity of freight passed through these canals during 1908 was 2,009,102 tons ; of this quantity 1,424,646 tons passed eastward and 584,456 passed westward.

East and West bound Through Freight.

The total quantity of through freight was 1,572,999 tons ; of this quantity 1,315,682 tons were east bound and 257,317 tons were west bound.

Way Freight.

Of the total quantity of (way) or local freight 108,964 tons were east bound and 327,139 tons west bound freight.

THROUGH TRAFFIC BETWEEN MONTREAL AND PORTS ON LAKE ERIE, MICHIGAN, ETC.

The total quantity of through freights passed eastward and westward through the Welland and St. Lawrence canals, from Lake Erie to Montreal during fifteen years, is as follows :—

	Eastward. to Montreal. Tons.	Westward. from Montreal. Tons.
1894	292,191	9,439
1895	266,659	10,555
1896	480,077	10,050
1897	584,246	4,542
1898	538,108	4,436
1899	354,933	5,991
1900	288,251	6,217
1901	184,420	13,714
1902	250,475	25,289
1903	390,786	100,699
1904	278,328	71,512
1905	448,704	72,482
1906	554,231	96,791
1907	789,167	1,281
1908	864,926	3,472

THROUGH FREIGHT FROM UNITED STATES PORTS TO UNITED STATES PORTS.

The total quantity of through freight passed eastward and westward through the Welland Canal, from United States ports to United States ports, for a period of fifteen years, is as follows :—

	Eastward. Tons.	Westward. Tons.	Total. Tons.
1894	361,319	230,948	592,267
1895	255,259	214,520	469,779
1896	385,695	267,518	653,213
1897	353,863	210,831	564,694
1898	277,023	210,516	487,539
1899	225,491	135,038	360,529
1900	218,969	99,560	318,529
1901	190,476	83,543	274,019
1902	224,110	44,919	269,029
1903	221,074	149,151	370,225
1904	165,337	87,144	252,481
1905	190,547	112,549	303,096
1906	237,226	84,205	321,431
1907	218,997	177,660	396,657
1908	209,518	239,136	448,654

The total quantity of freight passed through the Welland Canal from United States ports to United States ports shows an increase of 51,997 tons as compared with the previous year ; and a decrease of 143,613 tons as compared with 1894.

The following statement shows the aggregate number of vessels, and the total quantity of freight passed through the Welland Canal, and the quantity passed between United States ports during the years 1867 to 1908, inclusive.

Fiscal Year.	Aggregate number of Vessels.	Total quantity transported on the Welland Canal.	Quantity passed from United States ports to United States ports.
	No.	Tons.	Tons.
1867	5,405	933,260	458,386
1868	6,157	1,161,821	641,711
1869	6,069	1,231,903	688,700
1870	7,356	1,311,956	747,567
1871	7,729	1,478,122	772,756
Season of navigation.			
1872	6,063	1,333,104	606,627
1873	6,425	1,506,484	656,208
1874	5,814	1,389,173	748,557
1875	4,242	1,038,050	477,809
1876	4,789	1,099,810	488,815
1877	5,129	1,175,398	493,841
1878	4,429	968,758	373,738
1879	3,960	865,664	284,043
1880	4,104	819,934	179,605
1881	3,332	686,506	194,173
1882	3,334	790,643	282,806
1883	3,267	1,005,156	432,611
1884	3,138	837,811	407,079
1885	2,738	784,928	384,509
1886	3,589	980,135	464,478
1887	2,785	777,918	340,501
1888	2,647	878,800	434,753
1889	2,975	1,085,273	563,584
1890	2,882	1,016,165	533,957
1891	2,594	975,013	553,800
1892	2,615	955,554	541,065
1893	2,843	1,294,823	631,667
1894	2,412	1,008,221	592,267
1895	2,222	869,595	469,779
1896	2,766	1,279,987	653,213
1897	2,725	1,274,292	564,694
1898	2,384	1,140,077	487,539
1899	2,202	789,770	360,529
1900	2,399	719,360	318,529
1901	1,547	620,209	274,019
1902	1,568	665,387	269,029
1903	1,787	1,002,919	370,225
1904	1,433	811,371	252,481
1905	1,595	1,092,050	305,096
1906	1,536	1,201,967	321,431
1907	1,982	1,614,132	396,743
1908	2,351	1,703,453	448,654

The total quantity of freight passed through the several divisions of the canals during the season of 1908 is as follows:

—	Farm Stock.	Forest Produce of Wood.	Manufactures.	Merchandise.	Agricultural Products.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Welland		70,647	126,892	496,983	1,008,931	1,703,453
St. Lawrence	785	180,022	135,081	826,177	867,037	2,009,102
Chambly	201	364,396	2,619	126,034	10,026	503,276
Ottawa	523	204,490	504	46,293	6,717	258,527
Rideau	30	33,225	6,518	43,859	6,008	89,640
St. Peters	18	5,952	2,046	50,543	13,456	72,015
Murray	8	603	4,478	19,055	1,757	25,901
Trent Valley	340	65,377	1,152	14,004	817	81,690
Sault Ste. Marie	2	62,719	190,535	10,086,814	2,419,146	12,759,216

The total quantity of freight moved on the Welland Canal was 1,703,453 tons, of which 1,008,931 tons were agricultural products.

On the St. Lawrence canals the total quantity of freight moved was 2,009,102 tons, of which 867,037 were agricultural products, and 826,177 tons were merchandise.

On the Ottawa canals the total quantity of freight moved was 258,527 tons; of this quantity 204,490 tons were the produce of the forest.

COMPARATIVE STATEMENT of the Commerce through the United States, St. Mary's Falls Canals and Canadian Sault Ste. Marie Canal, for the Seasons of 1907 and 1908.

—	Traffic for 1908.		Total traffic for		Increase.	Decrease.
	United States canal.	Canadian canal.	Season 1908.	Season of 1907.	Amount.	Amount.
Vessels Number	9,891	5,293	15,184	20,440		5,256
Lockages "	6,739	3,667	10,406	14,020		3,614
Tonnage registered Net Tons	21,487,499	9,638,887	31,126,386	44,117,079		12,990,693
" freight "	28,657,297	12,759,216	41,416,513	58,220,011		16,803,498
Passengers Number	23,079	30,227	53,306	63,535		10,229
Coal (hard) Net Tons	1,023,686	338,749	1,362,435	1,522,018		159,583
" (soft) "	6,494,563	2,051,360	8,545,923	9,909,905		1,353,982
Flour Barrels	3,767,493	1,847,157	5,614,650	6,515,435		900,785
Wheat Bushels	48,131,791	58,567,143	106,698,934	98,240,260	8,488,674	
Grain (excluding wheat). "	22,870,302	20,582,403	43,452,705	37,847,182	5,605,523	
Manufactured & pig iron. Net Tons	162,476	145,703	308,179	330,643	22,464	
Salt Barrels	448,510	100,744	549,254	460,872		88,382
Copper Net Tons	92,474	8,855	101,329	93,686	7,643	
Iron ore "	17,251,898	7,385,103	24,637,001	39,587,112		14,950,111
Lumber ft. B.M.	423,513,000	33,652,355	457,165,355	638,315,546		181,150,191
Silver ore Net Tons						
Building stone "	1,019	10,570	11,589	24,352		12,763
Unclassified freight "	482,780	340,817	823,597	1,115,529		291,932

The United States canal was open to navigation during the season of—

1889	234 days	1899	231 days
1890	228 "	1900	238 "
1891	225 "	1901	230 "
1892	233 "	1902	256 "
1893	219 "	1903	249 "
1894	234 "	1904	223 "
1895	231 "	1905	245 "
1896	232 "	1906	249 "
1897	234 "	1907	233 "
1898	241 "	1908	231 "

The Canadian canal was open to navigation during the season of—

1895	87 days	1902	264 days
1896	218 "	1903	256 "
1897	238 "	1904	241 "
1898	243 "	1905	255 "
1899	239 "	1906	253 "
1900	238 "	1907	238 "
1901	246 "	1908	235 "

The average number of vessels passing per day through the two canals for the season of 1908 was over sixty-five.

The following were the current rates on Wheat and Corn from Chicago, Buffalo, Ogdensburg, Depot Harbour, and Montreal; also to New York by Lake and Erie Canal, for each week during the season of navigation.

	To Buffalo.		To Ogdensburg.		To Depot Harbour.		To Montreal.		Erie Canal, Buffalo to New York.		*Chicago to New York, Lake and Canal.	
	Wheat per bush.	Corn per bush.	Wheat per bush.	Corn per bush.	Wheat per bush.	Corn per bush.	Wheat per bush.	Corn per bush.	Wheat per bush.	Corn per bush.	Wheat per bush.	Corn per bush.
	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
April 6	1 5/8	1 1/2										
" 13	1 5/8	1 1/2		4								
" 20	1 5/8	1 1/2		3 3/4		1 1/2	5 3/4	5 3/4				
" 27	1 5/8	1 1/2		3 3/4		1 1/2	5 3/4	5 3/4				
May 4	1 5/8	1 1/2	4 1/4	3 3/4					5	4 5/8	6 3/4	5 7/8
" 11	1 5/8	1 1/2		3 3/4				5	5	4 5/8	6 3/4	5 7/8
" 18	1 5/8	1 1/2		3 3/4					5	4 5/8	6 3/4	5 7/8
" 25	1 5/8	1 1/2		3 3/4				5	5	4 5/8	6 3/4	5 7/8
June 1	1 5/8	1 1/2	4 1/8	3				4 7/8	5	4 5/8	6 3/4	5 7/8
" 8	1 5/8	1 1/2		4				4 7/8	5	4 5/8	6 3/4	5 7/8
" 15	1 5/8	1 1/2		3 3/4	1 5/8	1 1/2		5	5	4 5/8	6 3/4	6 1/8
" 22	1 5/8	1 5/8	4 1/4	3 3/4	1 5/8	1 5/8		5	5	4 5/8	6 3/4	6 1/8
" 29	1 5/8	1 5/8		3 3/4	1 5/8	1 5/8		5 1/4	5	4 5/8	6 3/4	6 1/8
July 6	1 5/8	1 3/4		3 3/4	1 5/8	1 5/8		4 7/8	5	4 5/8	6 7/8	6 1/8
" 13	1 5/8	1 5/8		3 3/4	1 5/8	1 5/8		4 7/8	5	4 5/8	6 3/4	6 1/4
" 20	1 5/8	1 5/8		3 3/4	1 5/8	1 5/8		5	5	4 5/8	6 3/4	6 1/4
" 27	1 5/8	1 5/8		3 3/4	1 5/8	1 5/8		4 3/8	5	4 5/8	6 3/4	6
Aug. 3	1 5/8	1		3 3/4	1 5/8	1 5/8		4 3/8	5	4 5/8	6 3/4	5 7/8
" 10	1 5/8	1		3 3/4	1 5/8	1 5/8		4 3/4	5	4 5/8	6 3/4	5 7/8
" 17	1 5/8	1		3 3/4	1 5/8	1	5 1/4		5	4 5/8	6 3/4	5 7/8
" 24	1 5/8	1 1/2	4	3 3/4	1 5/8	1 5/8	5 1/4		5	4 5/8	6 3/4	5 7/8
" 31	1 5/8	1 1/4		3 3/4	1 5/8	1 1/4	5 1/4		5	4 5/8	6 3/4	5 7/8
Sept. 7	1 5/8	1 1/4		3 3/4	1 5/8	1 1/4	5 1/4		5	4 5/8	6 3/4	5 7/8
" 14	1 5/8	1 1/2		3 3/4	1 5/8	1 5/8	5 3/8		5	4 5/8	6 3/4	6 1/4
" 21	1 5/8	1 1/2		3 3/4	1 5/8	1 1/2	5 3/8	5	5	4 5/8	6 3/4	6 1/4
" 28	1 1/4	1 3/4	4 1/4	3 3/4	1 5/8	1 5/8	5 1/4	5 1/4	5	4 5/8	6 7/8	6 3/8
Oct. 5	2	1 7/8		4	1 7/8	1 3/4	5 3/8	5 1/2	5	4 5/8	7	6 1/2
" 12	2	1 7/8		4	2	1 7/8	5 3/4	5 1/2	5	4 5/8	7	6 1/2
" 19	2	1 3/4	4 1/4	4	2	1 7/8	5 3/4	5 3/4	5	4 5/8	7	6 3/8
" 26	2	1 3/4		4	2	1 3/4	6	5 3/4	5	4 5/8	7	6 3/8

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Average Lake Freights.

The following statement shows the average rates of lake freights on wheat and corn between Chicago and Buffalo during each month in the past ten years, the highest and lowest rate on wheat in each year, and the average rates on wheat each year in cents, per bushel :—

(*Per Report of Secretary of Merchants' Exchange, Buffalo*).

		May.	June.	July.	Aug.	Sept.	Oct.	Nov.
		cts.	cts.	cts.	cts.	cts.	cts.	cts.
1898	Wheat	1·3	0.1	0·9	1·2	1·4	2·5	2·3
	Corn	1·2	0·8	0·8	1·1	1·3	2·3	2·1
Highest rate, wheat, 1898, 3¼c. ; lowest, 1¼ ; average for the season, 1·5c.								
1899	Wheat	2 0	2·0	2·2	2·5	3·1	3·5	2·5
	Corn	1·8	1·9	2·0	2·3	3·2	3·4	2·3
Highest rate, wheat, 1899, 3⅜c. ; lowest, 1⅞c. ; average for the season, 2·5c.								
1900	Wheat	1·8	1·9	2·1	1·6	1·7	1·7	2·0
	Corn	1·6	1·7	2·0	1·5	1·6	1·5	1·8
Highest rate, wheat, 1900, 3c. ; lowest, 1¼c. ; average for the season, 1·8c.								
1901	Wheat	1·9	1·5	1·6	1·3	1·6	1·3	2·0
	Corn	1·8	1·3	1·4	1·2	1·5	1·2	1·2
Highest rate, wheat, 1901, 2½c. ; lowest, 1¼c. ; average for the season, 1·60c.								
1902	Wheat	1·3	1·3	1·2	1·6	1·5	1·7	1·9
	Corn	1·2	1·1	1·1	1·4	1·4	1·6	1·7
Highest rate, wheat, 1902, 2½c. ; lowest, 1⅜c. ; average for the season, 1·5c.								
1903	Wheat	1·4	1·3	1·3	1·2	1·2	1·4	1·8
	Corn	1·3	1·2	1 2	1·0	1·0	1·3	1·6
Highest rate, wheat, 1903, 2¼c. ; lowest, 1¼c. ; average for the season, 1·4c.								
1904	Wheat	2·5	1·7	1·0	1·2	1·2	1·3	1·6
	Corn	2·5	1·3	0·8	1·0	1·1	1·2	1·5
Highest rate, wheat, 1904, 3c. ; lowest, 1c. ; average for the season, 1·5c.								
1905	Wheat	1·1	1·3	1·3	1·4	1·4	2·2	2·8
	Corn	1·0	1·2	1·1	1·2	1·3	2·0	2·7
Highest rate, wheat, 1905, 3c. ; lowest, 1⅛c. ; average for the season, 1·7c.								
1906	Wheat	1·3	1·3	1·5	1·9	1·7	2·0	2·0
	Corn	1·2	1·2	1·4	1·8	1·6	1·9	1·7
Highest rate, wheat, 1906, 2⅛c. ; lowest, 1⅜c. ; average for the season, 1·7c.								
1907	Wheat	1·3	1·7	1·5	1·2	1·6	2·0	1·5
	Corn	1·2	1·6	1·4	1·1	1·5	1·8	1·3
Highest rate, wheat, 1907, 2c. ; lowest, 1⅛c. ; average for the season, 1·5c.								

Lake Freight from Duluth to Buffalo on Wheat (as reported by the Secretary of the Merchants' Exchange, Buffalo, N.Y.)

The following statement shows the lake freight rates on wheat from Duluth to Buffalo, during the season 1907 :—

1907.	Wheat bushels.	1907.	Wheat bushels.
	cts.		cts.
April 22	2	Sept. 26	2
May 14	2¼	Oct. 1	2¼
" 21	2	" 12	2½
" 23	1⅞	Nov. 6	2¼
July 6	2¼	" 8	2
" 13	2	" 9	1⅞
" 17	1½	" 11	1¾
" 19	1	" 14	1½
Aug. 7	1¼	" 19	1⅝
" 19	1½	" 22	1¾
" 24	1⅜	" 23	2
Sept. 10	1½	Dec. 3 To load after the 5th	2½
" 18	1⅜		

In 1885 the range of freight on wheat, Duluth to Buffalo, was 1½ to 5c. ; in 1886, 3¼ to 8c. ; in 1887, 5 to 8c. ; in 1888, 2 to 5c. ; in 1889, 2 to 5c. ; in 1890, 2 to 5c. ; in 1891, 1¼ to 9½c. ; in 1892, 2¼ to 4c. ; in 1893, 1¼ to 3½c. ; in 1894, 1¼ to 3c. ; in 1895, 2 to 6c. ; 1896, 1¼ to 3c. ; in 1897, 1 to 2½c. ; in 1898, 1 to 3½c. ; in 1899, 2½ to 6c ; in 1900, 1½ to 3¾c, ; in 1901, 1⅛ to 3¾c. ; in 1902, 1 to 2¼c ; in 1603, 1⅛ to 2¾c. ; in 1904, 1 to 5c. ; in 1905, 1¼ to 4c. ; in 1906, 1¾ to 3c. ; and in 1907, 1 to 2½c. per bushel.

The first departure by lake, at Duluth in 1907, was April 27 ; in 1906, was April 13 ; in 1905, was April 8 ; in 1904, was May 14 ; in 1903, was April 9 ; in 1902 was on March 31 ; in 1901 was on May 6 ; in 1900 was on April 22 ; in 1899, on April 29 ; in 1898, was on April 16 ; in 1896, on April 22 ; and in 1895, on April 21. In 1894 season opened on April 19 ; in 1893, on May 8 ; in 1892 on April 21 ; in 1891, on April 30 ; in 1890, on March 26 ; in 1889, on April 20 ; in 1888, on May 12 ; in 1887, May 4 ; in 1886, on May 7.

Wheat was shipped at Kingston, Canada, per bushel, during the season of 1887, at 6¼ to 7¾c. : in 1888, at 4 to 5c. ; in 1889, at — ; in 1890, 5¾, 5½, 4½, 4¼, 4c. ; in 1891, during May, 3¾, 3½, 2½c. ; during June 3c. ; and on July 25, 2½c : in 1892, 5c. in April ; 5 to 5¼c. in May ; 4c. in June ; 4½c in July ; 3c. in August ; 6 to 6¼c. in October ; in 1903, ranged from 5¼ to 4½c. in April ; 4½ to 4¾c. in May ; 4 to 3½c. in June ; 2¾ to 3c. in July ; 3½ to 3¾c. in September ; no figures quoted after that date. In 1894 ranged from 3¼ to 3½c. in May ; 3½c. in June ; 2½c. in July ; 2½ to 3¼c. in August ; 4c. in September, and 4½c. in October. On August 25 and November 3, 1894, wheat to Ogdensburg, at 3¼c. and 4½c. respectively. In 1895, wheat to Kingston from 3c. to 5c. In 1896, wheat to Kingston from 3c. to 5½c. ; and in 1897, wheat to Kingston from 3c. to 3½c., according to the time of year ; 1898 to 1899 not given.

Lake Freights from Toledo to Buffalo on Wheat.

The following statements show the ruling rates of lake freights on wheat from Toledo to Buffalo, during the season of 1907 on the dates specified, as reported by the Secretary, Merchants' Exchange, Buffalo.

Date, 1907.	Wheat and Corn per Bushel.	Date, 1907.	Wheat and Corn per bushel.
	Cts.		Cts.
Opening to April 1	1	April 1 to July 14	1¼
July 14 to August 1	1½-1⅝	August 1 to close	1¼-1½

The range for 1886 was 1¾ to 3c. ; for 1887, 2¼ to 3c. ; for 1888, 1½ to 2⅛c. ; for 1889, 1¾ to 2c. ; for 1890, 1½ to 2c. ; 1891, 1 to 3c. ; for 1892, 1½ to 2½c. ; for 1893, 1 to 2c. ; for 1894, 1 to 2c. ; for 1895, 1 to 2¼c. ; for 1896, 1¼ to 1¾c. ; for 1897, 1 to 1¼c. ; for 1898, 1 to 1½c. ; for 1899, 1½ to 2c. ; for 1900, 1½ to 2c. ; for 1901, 1¼ to 1½c. ; for 1902, 1⅛ to 2c. ; for 1903, 1⅛ to 1½c. ; for 1904, 1 to 1¾c. ; for 1905, 1 to 1½c. for 1906, 1 to 1½c. ; and for 1907 1⅛ to 1½c. per bushel.

From Toledo to Ogdensburg, wheat and corn shipped at 6 to 7c. in 1887 ; at 4½ to 6c. for wheat and 5c for corn in 1888 ; and 5 to 5⅞c. for wheat in 1889 per bushel. From Toledo, on October 8, 1887, corn shipped to Kingston at 3½c., and on November 12, at 4½c. per bushel. In 1888, corn, Toledo to Kingston 4½ to 3c. ; and wheat at 3½ to 3c. per bushel. In 1889, wheat, Toledo to Kingston, 3c. ; and in 1891, rye, Toledo to Kingston at 3c. per bushel. From Toledo, on June 2, 1887, wheat shipped to Montreal by propeller at 6½c. ; on June 14, corn at same price ; but on September 26, the rate on corn was only 5c. per bushel. In 1888, corn, Toledo to Montreal, at 6 to 5¾c., and wheat at 5½c per bushel. From 1889 to 1899, no shipments to Montreal or other places in Canada reported.

Canal Freight from Buffalo to New York.

The following shows the changes in the ruling rates of freight to New York from Buffalo, on the days specified in 1907 (as reported by the Secretary, Merchants' Exchange, Buffalo).

Date, 1907.	Wheat, Bushels.	Corn, Bushels.	Date, 1907.	Wheat, Bushels.	Corn, Bushels.
	Cts.	Cts.		Cts.	Cts.
May 1	5	4⅝	Nov. 4, to close	5½	5

Freight on oats varied from 3¼ to 3½c. per bushel. Pine lumber, per 1,000 feet, was carried from Buffalo to Tonawanda to New York as follows: Opened at $2.00; June, $2.00; July, $2,00; August, $2.00; September, $2.25; October, $2.25; to close. Rates to Albany opened $2.50; June, $2.50; July, $2.50; August, $2.50; September, $2.75; October, $2.75 to close.

AVERAGE CANAL FREIGHTS.

BUFFALO TO NEW YORK.

The following statement shows the average rates of canal freights on wheat and corn between Buffalo and New York during each month in the past ten years, and the highest and lowest rates on wheat and average rate on wheat on each:—

(Reported by Sec. Merchants' Exchange, Buffalo.)

	Grain.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.
		cts.	cts.	cts.	cts.	cts.	cts.	cts.
1898	Wheat	3·0	2·9	2 8	2·7	2·6	3·0	3·0
	Corn	2·5	2·3	2·4	2·1	2·2	2 6	2·6
Highest rate, wheat, 1898, 3·4c.; lowest, 2·5c.; average for the season, 2·8c.								
1899	Wheat	2·5	2·7	2·4	2·5	2·5	3·6	4·2
	Corn	2·3	2·3	2·1	2·1	2·2	3·0	3·5
Highest rate, wheat, 1899, 4·5c.; lowest, 2·5c.; average for the season, 2·8c.								
1900	Wheat	2·4	2·2	2·3	2·3	2·2	2 7	3·5
	Corn	2·1	2·0	2·1	2·0	2·0	2·4	3·0
Highest rate, wheat, 1900, 3½c.; lowest, 2c.; average for the season, 2·5c.								
1901	Wheat	3 4	3·2	3·2	3·2	3·3	4·0	4·1
	Corn	2·7	2 7	2·8	2·9	3·1	3 7	3·8
Highest rate, wheat, 1901, 4⅜c.; lowest, 3¼c.; average for the season, 3·5c.								
1902	Wheat	4·0	3·8	3·3	3·3	3·8	4·0	4·1
	Corn	3·6	3·4	3·1	3·1	3·5	3·7	3·8
Highest rate, wheat, 1902, 4½c.; lowest, 3⅜c.; average for the season, 3·8c.								
1903	Wheat	4·1	4·1	4·2	4·2	4·0	3·7	3·7
	Corn	3·7	3·7	3·8	3·8	3·6	3·3	3·3
Highest rate, wheat, 1903, 4¼c.; lowest, 3⅜c.; average for the season, 4c.								
1904	Wheat	3·5	3·2	2·7	2·6	2·8	3·5	3·7
	Corn	3·0	2·7	2·4	2·1	2·4	3·0	3·1
Highest rate, wheat, 1904, 3⅜c.; lowest, 2½c.; average for the season, 3·2c.								
1905	Wheat	4·0	3·4	3·3	3·3	3·6	4·3	5·0
	Corn	3·6	3·0	3·0	3·0	3·2	4·1	4·8
Highest rate, wheat, 1905, 5c.; lowest, 3⅜c.; average for the season, 3·9c.								
1906	Wheat	4·0	4·0	4·0	4 0	4·1	4·6	5·0
	Corn	3·6	3·6	3·6	3·6	3·7	4·3	4·6
Highest rate, wheat, 1906, 5c.; lowest, 4c.; average for the season, 4¼c.								
1907	Wheat	5·0	5·0	5·0	5·0	5·0	5·0	5·5
	Corn	4·6	4·6	4·6	4·6	4·6	4·6	5·0
Highest rate, wheat, 1907, 5½c.; lowest, 5c.; average for the season, 5c.								

Note.—Canals free of tolls since 1882.

FREIGHT, TOLLS, ELEVATING AND STORAGE RATES COMPARED.

The following statement shows the receipts of grain and flaxseed at Buffalo, the average canal freight on wheat, and the tolls on wheat to New York, and the elevating and storage rates at Buffalo for a series of years (as reported by Secretary, Merchants' Exchange, Buffalo) :—

Year.	Grain received.	Average Canal Freight on Wheat.	Tolls on Wheat.	Elevating, including Storage.
	Bush.	Cts.	Cts.	Cts.
1870	32,208,039	11·2	3·1	1¼
1871	61,319,313	12·6	3·1	1¼
1872	58,703,666	13·0	3·1	1¼
1873	65,498,955	11·4	3·1	1¼
1874	55,660,198	10·0	3·1	1¼
1875	52,833,451	7·9	2·0	1
1876	44,207,121	6·6	2·0	1
1877	61,822,292	7·4	1·0	1
1878	78,828,443	6·0	1·0	1
1879	75,089,768	6·8	1 0	1
1880	105,133,009	6·5	1·0	1
1881	56,389,827	4·7	1·0	¾
1882	51,501,503	5·4	1·0	¾
1883	65,722,080	4·9	None.	¾
1884*	58,011,800	4·2	do	¾
1885*	52,671,090	3·8	do	¾
1886*	75,570,850	5·0	do	¾
1887*	87,073,570	4·6	do	¾
1888*	73,977,390	3·4	do	¾
1889*	92,290,550	4·8	do	¾
1890*	91,994,680	3·8	do	¾
1891*	135,315,510	3·5	do	¾
1892*	138,872,560	3·5	do	¾
1893*	140,796,410	4·6	do	¾
1894*	105,435.577	3·2	do	¾
1895*	121,225,497	2·2	do	¾
1896*	172,474,664	3·7	do	¾
1897*	204.964,103	2·8	do	¾
1898*	221,383,945	2·8	do	¾
1899*	153,393,184	3·0	do	¾
1900*	157,655,968	2·5	do	½
1901	132,646,828	3·5	do	½
1902	124,624,386	3·8	do	½
1903	140,438,822	4·0	do	½
1904	100,838,000	3·2	do	½
1905	126,465,729	3·9	do	½
1906	136,066,528	4·2	do	½
1907	132,438,798	5·0	do	½

NOTE.—Prior to 1870 tolls 6·21 cents per bushel, and the elevating charge 2 cents per bushel.
* Including flaxseed.

AVERAGE FREIGHT CHARGES PER BUSHEL.

For the transportation of Wheat and Corn from Chicago to New York for a series of years.

(From Report of Board of Trade, Chicago.)

Year.	Corn.			Wheat.		
	By lake and canal.	By lake and rail.	By all rail.	By lake and canal.	By lake and rail.	By all rail.
	$	$	$	$	$	$
1858	·127	.....	·3619	·1550	....	·3861
1859	·1570	.....	·3248	·1663	.....	·3480
1860	*a* ·0833	....	·3248	*a* ·095	... ..	·3480
1861	*a* ·1062	.....	·3881	*a* ·1210	....	·4158
1862	*a* ·0957	....	·4480	*a* ·1062	.....	·4800
1863	*a* ·063	..... .	·4592	*a* 072	.....	·4920
1864	*a* ·09	....	·5600	*a* ·052	.....	·60
1865	*a* 0864	....	·4188	*a* ·0894	.....	·4488
1866	*a* ·1075	.....	·4312	*a* ·1377	....	·4620
1867	*a* ·0511	.. ..	·4176	*a* ·08	.....	·4475
1868	*a* ·0604	....	·3532	*a* ·0802	.....	·3784
1869	*a* ·0584	·2355	·3320	*a* ·0651	.2520	·3557
1870	*a* ·16	·2220	·28	*a* ·0677	·2250	·30
1871	*a* 0754	·2372	·2968	*a* ·0687	·2542	·3180
1872	*a* ·1072	·2660	·3266	*a* ·1110	·2950	·3499
1873	*a* ·0816	·2298	·2893	*a* ·0917	·2461	·3102
1874	*a* ·0382	·1388	·2450	*a* ·0400	·1907	·2625
1875	*a* ·034	·1303	·2240	*a* ·0378	·1389	2400
1876	*b* ·0875	·1079	·1574	*b* ·0982	·1136	·1686
1877	*b* ·0959	·1406	·1890	*b* ·1100	·1546	·2050
1878	*b* ·0883	·1053	·1652	*b* ·0966	·1209	·1770
1879	*b* ·1049	·1220	·1456	*b* ·1187	·1313	·1774
1880	*b* ·1341	·1443	·1748	*b* 1313	·1580	·1980
1881	*b* ·0777	·0942	·1340	*b* 0867	·1049	·1440
1882	*b* ·0672	·1028	·1350	*b* ·0723	·1091	·1447
1883	*b* ·0803	·11	·1512	*b* ·0901	·1163	·1620
1884	*b* ·0655	·085	·1232	*b* ·07	·10	·1320
1885	*b* ·063	·0801	·1232	*b* ·0654	·0902	·1320
1886	*b* ·0845	.1120	·14	*b* ·0910	12	·1500
1887	*b* ·0850	·1120	·1470	*b* ·0950	·12	·1575
1888	*b* ·0671	·1026	·1354	*b* ·0705	·1114	·1450
1889	*b* ·0632	·0819	·126	*b* ·0692	·0897	·1500
1890	*b* ·0593	·0732	·1136	*b* ·0676	·0852	·1430
1891	*b* ·0632	·0753	·1400	*b* ·0695	·0857	·1500
1892	*b* ·0595	·0721	·1296	*b* ·0645	·0759	·1380
1893	*b* ·0718	·0797	·1365	*b* ·0766	·0848	·1463
1894	*b* ·0493	·0650	·1232	*b* ·0511	·0700	·1320
1895	*b* ·0450	·0640	·1029	*b* 0486	·0696	·1189
1896	*b* ·0575	·0615	·1050	*b* ·0619	·0661	·1200
1897	*b* ·0453	·0692	·1143	*b* ·0522	·0742	·1250
1898	‡ ·0381	·0441	·0980	‡ ·0445	·0491	·1200
1899	‡ ·0508	.0583	·1008	‡ ·0581	·0663	·1160
1900	‡ ·0407	·0472	·0919	‡ ·0449	·0510	·0896
1901	‡ ·0461	·0516	·0921	‡ ·0511	·0554	·0988
1902	‡ ·0483	·0551	·0994	‡ ·0526	·0589	·1062
1903	‡ ·0485	.0578	·1054	‡ ·0540	·0637	·1129
1904	‡ ·0363	·0482	·1038	‡ ·0473	·0550	·1112
1905	‡ ·0476	·0519	·0940	‡ ·0553	·0640	·0990
1906	‡ ·0551	·0572	·0952	‡ ·0603	·0635	·1020
1907	‡ ·0612	·0620	·1017	‡ ·0665	·0709	·1090

a To Buffalo only. *b* Including Buffalo charges and tolls. ‡ Exclusive of Buffalo charges.

FOREIGN FREIGHT RATES.

ANNUAL average Freight Rates on Grain, Flour and Provisions (per 100 lbs.) from Chicago to European Ports, by all Rail to Sea-board and thence by Steamers.

Shipped to	Articles.	1907.	1906.	1905.	1904.	1903.
		$	$	$	$	$
Liverpool	Grain	.1922	.1875	.1916	.2019	.2268
"	Sacked flour	.2125	.2050	.2240	.2100	.2519
"	Provisions	.4085	.4100	.3849	.3656	.4190
Glasgow	Grain	.1967	.1925	.2000	.2238	.2443
"	Sacked flour	.2391	.2360	.2250	.2320	.2538
"	Provisions	.4688	.4563	.4323	.4406	.4688
London	Grain	.2054	.1925	.2023	.2150	.2356
"	Sacked flour	.2363	.2250	.2364	.2225	.2519
"	Provisions	.4626	.4626	.4088	.4406	.4406
Antwerp	"	.4556	.4761	.4370	.4828	.4969
Hamburg	"	.4600	.4900	.4575	.4600	.4760
Amsterdam	"	.4500	.4600	.4542	.4200	.4200
Rotterdam	"	.4500	.4600	.4553	.4200	.4200
Copenhagen	"	.5100	.5100	.4866	.4688	.4969
Stockholm	"	.5300	.5350	.5147	.4969	.5250
Stettin	"	.4900	.5000	.4818	.4688	.4969
Bordeaux	"	.5500	.5300	.5145	.5625	.5625

LAKE FREIGHTS ON COAL FROM BUFFALO TO CHICAGO AND OTHER PORTS.

The following statement shows the average freight rate on Coal (per net ton, in cents) from Buffalo to the ports named, during the seasons of 1906 and 1907.

(Buffalo Merchants' Exchange.)

	1906.	1907.
Freight on hard Coal, Buffalo to Chicago, per ton	46	40
" " Milwaukee "	45	40
" " Duluth "	39	31

A–TABLE showing the total Tonnage of the undermentioned Articles moved Up and Down.

Year.	VEGETABLE FOOD.						
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles. †
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869*	45,674	313,825	120,599	20,951	.....	904	1,937
1872	26,651	239,998	254,902	6,035	7,752	64	2,745
1873	30,665	355,847	180,169	8,225	1,194	3	3,777
1874	24,019	413,212	181,151	18,871	5,954	513	8,677
1875	13,964	253,835	103,749	35,751	3,383	917	6,337
1876	15,778	201,906	144,501	18,455	24,496	1,454	3,198
1877	13,558	253,953	169,196	19,870	2,810	2,439	2,355
1878	9,121	191,982	185,931	10,979	3,088	.....	2,302
1879	10,710	274,570	144,506	4,655	1,239	440	2,444
1880	12,679	242,020	163,738	17,772	477	1,016	1,480
1881	9,959	127,832	101,075	24,509	.....	1,844	2,086
1882	12,261	215,056	54,799	20,126	611	3,226	403
1883	13,471	152,794	182,269	10,436	731	1,642	10,983
1884	13,683	144,851	118,811	7,155	10,746	1,320	9,168
1885	13,334	124,206	117,536	15,801	1,116	.....	1,912
1886	19,474	154,169	219,442	1,595	4,911	564	14,657
1887	23,949	221,927	114,938	9,574	12,050	.....	12,533
1888	16,983	160,963	194,886	5,906	26,629	811	13,608
1889	7,931	126,664	353,595	4,272	28,356	2,673	18,552
1890	14,461	118,002	327,394	10,830	27,728	1,549	20,876
1891	13,517	198,658	185,180	8,113	52,959	65,888	28,042
1892	17,046	232,019	192,548	6,433	37,173	9,392	32,815
1893	15,235	258,392	441,092	18,599	31,283	3,671	36,981
1894	33,628	270,993	169,233	28,353	27,962	567	60,673
1895	44,044	203,088	164,894	8,689	18,236	1,007	46,463
1896	42,425	320,563	320,444	11,368	28,178	9,405	56,591
1897	9,065	324,743	390,615	14,173	25,161	8,483	44,674
1898	5,578	207,647	437,861	12,286	17,502	16,127	23,182
1899	11,625	197,732	204,004	2,907	24,037	923	18,460
1900	10,968	137,800	163,509	4,035	41,055	3,538	14,815
1901	18,978	151,586	67,756	7,119	28,485	2,961	14,024
1902	22,282	225,171	67,647	7,418	11,232	4,079	12,963
1903	25,998	259,031	210,758	14,656	7,911	4,904	13,994
1904	35,049	165,138	116,444	27,171	16,582	.....	13,184
1905	38,512	254,458	180,921	55,432	36,072	1,711	9,883
1906	18,294	326,798	211,805	31,446	49,306	1,784	10,739
1907	22,739	488,565	271,693	13,240	73,369	2,270	22,683
1908	23,209	732,131	127,402	31,172	33,423	6,667	21,668

* Fiscal. † Apples, meal of all kinds, pease, potatoes.

through the Welland Canal, during a period of thirty-eight years, ended Dec. 31, 1908.

	Heavy Goods.						
Total.	Railway Iron.	Other Iron.	Salt.	Iron and Salt having paid full tolls on St. Lawrence Canals.	Coal.	Ores.	Total.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
503,860	46,806	16,924	91,575	37,153	103,126	58,781	275,623
538,147	26,217	17,141	50,540	44,243	186.932	98,605	3,678
579,880	6,923	20,754	40,850	17,157	339,016	118,685	43,387
647,397	6,032	12,068	23,309	9,579	323,503	56,825	431,316
417,936	1,517	7,588	13,509	9,962	321,306	43,683	397,565
409,788	51	7,997	30,300	20,327	288,211	81,654	378,540
464,181	9,630	9,696	9,173	3,983	323,869	42,758	399,109
403,403	10	11,518	3,980	12,686	295,318	15,229	338,741
438,564	2,782	5,797	7,174	17,796	192,957	19,164	245,670
442,182	5,360	4,812	413	22,273	109,986	34,139	176,983
269,395	4,585	7,013	10	30,682	128,113	18,785	189,188
306,482	.....	5,348	50	17,327	237,559	23,700	283,984
373,326	1,237	7,922	66	17,037	307,058	31,785	365,105
305,734	698	652	461	3,242	274,471	53,205	332,729
273,905	78	2,055	597	14,243	248,272	26,728	291,973
414,812	166	6,123	48	12,324	271,356	27,447	317,464
394,971	1,351	5,636	.....	6,715	145,193	13,866	172,761
419,786	93	3,220	316	13,617	223,871	16,872	257,989
542,043	47	2,479	1,254	20,269	268,305	2,435	294,789
519,291	.....	753	1,027	28,047	202,384	8,138	240,349
367,177	127	1,610	2,567	7,953	224,644	3,415	240,316
527,426	163	1,567	878	3,666	211,616	355	218,245
805,253	6	2,075	374	8,139	233,096	.....	243,690
591,409	.....	3,072	159	977	203,608	.....	207,816
486,421	185	6,245	54	2,819	158,866	1,140	169,309
788,974	1,192	6,332	82	3,264	223,445	1,158	235,473
816,914	7,206	17,012	227	590	176,226	.....	201,261
720,183	1,444	11,722	799	734	162.336	13,433	190,468
459,688	567	6,361	1,282	1,318	97,732	26,125	133,385
375,720	.....	8,190	533	4,800	47,392	58,400	119,315
290,909	83	6,094	327	8,773	49,480	99,487	164,244
350,792	64	7,488	... .	15,201	64,014	22,480	109,247
537,252	488	5,407	2,554	45,846	147,884	18,323	220,502
373,568	11,381	9,957	1,093	4,164	113,525	39,683	179,803
576,989	2,651	10,912	226	4,221	172,642	22,381	213.033
650,172	3,747	8,493	160	16,204	147,587	5,862	181,993
894,559	961	4,923	246	18,761	267.212	25,040	317,143
975,672	.....	35,726	429	.....	316,921	18,004	080

B.—TABLE showing the Total Way and Through Tonnage of the undermentioned Articles cleared downward on the Welland Canal during a series of thirty-eight years, ended December 31, 1908.

VEGETABLE FOOD.

Year.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles. †	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869	44,110	310,090	119,541	3,920	.....	680	1,541	479,882
1872	26,648	231,056	254,534	693	7,594	64	2,300	524,889
1873	30,660	345,720	180,042	643	1,188	3	3,557	563,813
1874	24,017	406,157	181,128	377	5,953	.....	3,301	620,933
1875	13,930	248,555	103,477	813	3,383	500	4,304	374,962
1876	15,735	194,559	144,501	1,110	24,496	1,454	2,949	384,807
1877	13,588	248,894	169,185	10,216	2,810	2,405	1,833	448,931
1878	8,854	188,106	185,931	1,217	3,088	....	2,100	389,296
1879	10,588	271,545	114,276	803	1,196	.....	2,387	430,795
1880	12,467	240,601	162,891	....	477	. ...	1,418	417,853
1881	9,655	121,393	103,075	252	.. . .	6	1,371	235,752
1882	12,205	205,876	54,797	537	.....	1,954	225	275,594
1883	13,256	146,741	182,143	975	731	518	10,971	355,335
1884	13,626	135,804	118,811	270	10,746	477	9,018	288,752
1885	13,322	114,090	117,536	618	1,116	.....	1,628	248,310
1886	19,418	146,151	218,897	. .. .	4,891	.....	14,581	403,928
1887	23,940	210,755	114,938	1,711	12,050	....	12,149	375,543
1888	16,973	150,833	194,886	555	26,629	811	13,358	404,045
1889	7,922	120,498	353,595	197	28,356	1,918	18,273	530,759
1890	14,461	114,924	327,394	6,519	27,728	1,121	20,836	512,983
1891	13,517	196,326	185,177	8,113	52,959	65,071	27,895	549,058
1892	17,046	229,569	192,548	6,433	37,173	9,392	32,548	524,709
1893	15,232	257,203	441,092	18,461	31,283	3,671	36,981	803,923
1894	33,628	270,514	169,233	28,353	27,962	.....	60,587	590,277
1895	43,895	202,636	164,894	8,689	18,236	.....	46,435	484,785
1896	42,159	319,388	320,444	11,368	28,178	8,970	54,031	784,538
1897	9,025	322,993	390,615	14,173	25,127	8,483	44,651	815,067
1898	5,578	206,313	437,849	12,286	17,491	16,127	23,170	718,814
1899	11,625	197,732	204,004	2,424	23,541	923	18,440	458,689
1900	10,968	137,800	163,509	3,449	40,256	3,538	14,802	374,322
1901	18,937	151,325	67,756	7,119	28,281	2,961	14,021	290,400
1902	22,282	223,499	67,647	7,418	11,223	4,079	12,912	349,060
1903	25,997	257,370	210,758	14,656	7,911	4,904	13,982	535,578
1904	35,046	164,515	116,444	27,171	16,582	....	13,157	372,915
1905	38,512	247,599	180,921	55,432	36,072	1,711	9,882	570,129
1906	18,227	326,789	111,243	31,446	49,306	1,411	10,739	549,161
1907	22,689	488,565	271,693	13,240	73,369	2,270	22,683	894,509
1908	23,187	730,751	127,402	31,172	33,423	6,667	21,668	974,270

* Fiscal. † Apples, meal all kinds, pease, potatoes.

C.—Table showing the Tonnage of the undermentioned Articles passed through the Welland Canal in transit between Ports in the United States during a series of thirty-eight years, ended December 31, 1908.

Years.	Vegetable Food.								Heavy Goods.					
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	*Other articles.	Total.	Railway Iron.	Other Iron.	Salt.	Coal.	Ores.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869	30,681	211,085	91,149	2,942	.....	667	1,006	337,530	68,064	14,334	89,086	28,566	35,912	235,962
1872	10,482	124,695	89,761	1,391	7,400	.....	608	234,337	24,040	13,239	49,843	95,741	59,401	224,264
1873	10,805	127,727	101.329	1,920	1,188	3	392	243,366	4,659	13,826	40,507	170,242	62,942	292,176
1874	8.230	229,053	125,627	.....	5,948	.....	5,368	374,226	5,742	8,941	22,888	203,673	19,651	260,895
1875	1,881	113.832	54,188	2,641	2,946	500	1,920	177,908	14	4,123	12,931	192,767	34,616	244,451
1876	5,187	96,247	58,138	.....	1,905	525	403	162,405	.....	5,531	29,395	167,110	25,808	227,844
1877	3,342	107,396	65,260	1,603	2,314	258	413	180,586	8,976	8,688	8,336	172,868	41,107	239,975
1878	1,316	65,542	60,026	859	277	.....	341	128,361	.....	10,713	3,892	150,583	13,535	178,723
1879	159	53,791	33,401	.....	464	.....	11	87,826	2,405	3,648	6,318	118,573	17,797	148,741
1880	.....	30,611	16,122	1,551	296	.....	.....	48,580	4,743	3,515	371	65,945	18,380	92,954
1881	.....	34,320	30,031	924	.....	.....	10	65,285	1,313	5,570	.....	83,858	6,464	97,205
1882	107	30,227	32,433	537	.....	684	14	64,002	.....	4,076	.....	158,552	14,533	177,161
1883	2,041	54,382	66,128	735	731	.....	8,579	132,496	1,209	6,901	8	196,462	24,891	229,471
1884	1,715	40,956	53,707	.....	9,874	.....	8,170	114,422	698	599	.....	210,790	15,100	227,187
1885	124	53,235	63,229	732	882	.....	1	118,203	.....	1,594	.....	198,416	15,029	215,039
1886	7,591	53,258	94,048	.....	4,790	.....	13,201	172,888	156	5,328	1	189,964	11,364	206,813
1887	11,780	37,678	83,431	1,732	12,050	.....	10,859	157,530	15	4,406	.....	82,780	627	87.828
1888	8,563	39,999	102,974	2	26,510	179	11,598	189,825	63	1,601	56	173,259	2,309	177,288
1889	5,017	39,229	147,045	.....	27,492	.....	17,225	236,208	.....	1,587	896	227,476	1,204	231,163
1890	9,204	31,527	180,842	6,519	27,030	.....	20,497	275,619	.....	504	208	162,231	1,620	164,563
1891	6,802	32,097	127,494	8,113	52,823	.....	26,115	253,444	.....	292	705	186,572	1,773	189,342
1892	11,018	26,950	131,222	6,433	36,935	.....	31,992	244,550	.....	576	2	183,895	.....	184,473
1893	6,588	28,187	198,777	16,751	23,870	864	36,352	311,389	.....	344	.....	206,827	.....	207,171
1894	17,795	53,846	105,329	28,095	27,621	.....	60,462	198,358	.....	297	.....	188,521	.....	188,818
1895	10,169	27,881	100,512	7,904	17,020	.....	46,316	209,802	181	246	.....	149,490	.....	149,917
1896	16,224	34,878	175,094	11,128	16,137	490	46,456	300,407	.....	146	.....	207,348	.....	207.494
1897	7,237	28,919	169,057	14,173	14,969	.....	41,887	276,242	965	15	.....	165,143	.....	166,123
1898	4,212	11,268	150,667	6,909	12,732	1,197	22,671	209,656	770	339	4	156,814	.....	157,927
1899	6,118	12,926	81,777	2,424	19,526	923	18,198	141,892	351	1,646	553	88,931	.....	91,481
1900	7,966	18,771	60,545	2,402	39,706	2,149	14,248	145,787	.....	953	.....	46,024	.....	46,977
1901	17,165	23,557	55,531	7,119	26,344	.....	14,016	143,732	83	80	105	46,702	.....	46,970
1902	13,785	32,639	66,111	7,418	10,006	.....	12,675	142,634	.....	214	.....	12,911	.....	13,125
1903	6,082	15,439	108,917	11,433	6,112	4,174	13,568	165,725	459	.....	.....	113,072	.....	113,535
1904	8,556	14,269	60,964	16,621	16,497	.....	13,079	129,986	.....	.....	.....	63,882	.....	63,882
1905	24,054	15,483	93,622	9,197	10,892	.....	9,682	162,930	.....	1	.....	73,464	.....	73,465
1906	15,215	13,410	135,240	9,266	11,323	.....	10,678	195.132	.....	169	.....	33,523	.....	33,692
1907	18,898	21,892	124,474	2,812	4,741	2	22,001	194,820	.....	30	.....	110,347	4,050	114,420
1908	17,694	24,651	99,830	7,148	2,070	2	21,393	172,788	.....	.....	.....	158,351	1,400	159,751

* Apples, meal all kinds, pease, potatoes.

D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels entering the Canal at Port Colborne, during the Season of Navigation in 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906 and 1907, 1908.

ARTICLES.	CANADIAN VESSELS.				AMERICAN VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	225	131,907	163	76,760	388	382,231	144	86,675	920	677,573
1897.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	121,762		55,724		106,064		37,891		321,441	
Corn	33,694		15,244		274,855		66,822		390,615	
Barley					14,173				14,173	
Oats	223				23,515		1,168		24,906	
Pease	1,851								1,851	
Rye	2,047		919		5,517				8,483	
Coal	3,873		3,947		368		1,615		9,803	
Miscellaneous merchandise	15,739		3,290		70,968		4,174		94,071	
Shingles, woodenware, &c	1,268		5		404				1,677	
Sawed lumber Ft. B.M.	1,573,447				20,284,446		20,673,202		42,531,095	
Square timber Cub. ft	1,327,823		2,217,629				616,093		4,161,545	
Staves No.	2,577,160								2,577,160	
Firewood Cord.	4								4	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	126,398	104	59,532	354	355,702	195	108,720	869	650,352
1898.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	95,567		36,157		54,934		18,355		205,013	
Corn	56,538		30,455		284,059		66,761		437,813	
Barley					9,465		2,821		12,286	
Oats					17,329				17,329	
Pease	260				45				305	
Rye	3,564		1,480		9,135		1,948		16,127	
Coal	575		1,916		759		2,620		5,870	
Miscellaneous merchandise	19,385		4,104		47,271		8,758		79,518	
Shingles, woodenware, &c	2		9						11	
Sawed lumber Ft. B.M.	4,910,669		1, 641,783		16,220,972		24,484,283		47,257,707	
Square timber Cubs ft.	825,545		1,183,821				388,410		2,397,776	
Firewood Cord.										
Staves No.	249								249	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	191	100,242	129	75,777	201	212,027	78	36,962	599	425,008
1899.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	91,901		80,928		16,250		7,244		196,323	
Corn	28,015		18,905		138,834		18,250		204,004	
Barley					2,424				2,424	
Oats	1,557				21,646				23,203	
Peas										
Rye					923				923	
Coal	435		6,736				3,398		10,569	
Miscellaneous merchandise	25,203		18,651		49,522		1,567		94,943	
Shingles, woodenware, &c	485		916				100		1,501	
Sawed lumber Ft. B.M	2,077,748		772,739		14,855,338		19,949,079		37,654,904	
Square timber Cub. ft.	322,138		585,780		20,802		328,806		1,257,526	
Firewood Cords.			9						9	
Staves No.										

SESSIONAL PAPER No. 20a

D—STATEMENT showing the Quantity of Through Freight passed DOWN the Welland Canal in Canadian and United States Vessels, &c.—*Continued*

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	114,885	109	67,475	168	182,444	71	30,309	564	395,113
1900.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat		67,694		43,157		23,066		2,130		136,047
Corn		39,597		31,248		78,701		13,963		163,509
Barley						2,402		1,047		3,449
Oats						39,706		407		40,113
Peas		115				4				119
Rye		1,389				2,149				3,538
Coal		723		637		433		559		2,352
Miscellaneous merchandise		53,649		31,536		43,344		3,564		132,093
Shingles, woodenware, &c		1,078								1,078
Sawed lumber.....Ft. B.M.		6,847,279		5,344,258		14,984,483		18,770,405		45,946,425
Square timber .....Cub. ft.		439,827		355,951		11,583		198,420		1,005,781
Firewood .....Cords.		126		255						381
Staves... .... No.		1,000								1,000
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	197	103,802	114	59,022	163	182,497	48	22,319	522	367,640
1901.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat		57,641		58,973		31,955		1,241		149,810
Corn		7,350		4,689		55,717				67,756
Barley						7,119				7,119
Oats		944				27,197				28,141
Peas										
Rye		2,961								2,961
Coal		1,960		362		357				2,679
Miscellaneous merchandise		71,300		32,312		12,874		7,469		123,955
Shingles, woodenware, &c		18								18
Sawed lumber.....Ft. B.M.		6,533,423		4,060,251		11,089,806		13,092,940		34,776,420
Square timber..... Cub. ft.		362,441		204,682		9,384		149,531		726,038
Firewood.....Cords.		165		264						429
Staves.....No.										
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	196	90,791	122	73,958	191	201,339	52	22,097	561	388,185
1902.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat		82,954		85,973		52,889				221,816
Corn		148		1,388		66,111				67,647
Barley						7,418				7,418
Oats		1,200		43		9,963				11,206
Peas										
Rye		3,808				271				4,079
Coal		3,977		25,732		13,497		8,332		51,538
Miscellaneous merchandise		33,111		8,723		38,351		1,594		81,779
Shingles, woodenware, &c		47		28		4				79
Sawed lumber.....Ft. B.M.		13,218,960		3,256,187		25,437,287		19,540,426		61,452,860
Square timber.....Cub. ft.		370,718		557,689				115,000		1,043,407
Firewood .....Cords.		56		40						96
Staves.....No.				14,000						14,000

D—STATEMENT showing the Quantity of Through Freight passed DOWN the Welland Canal in Canadian and United States Vessels, &c.—*Continued.*

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	239	151,850	76	45,918	243	252,094	69	27,854	627	477,716
1903.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	149,378		38,473		60,514		6,305		254,670	
Corn	21,356		4,682		174,588		10,132		210,758	
Barley	2,580		667		11,409				14,656	
Oats	306		1,335		6,112				7,753	
Peas	63				22				85	
Rye					4,904				4,904	
Coal	389		12,991		8,133		8,496		30,009	
Miscellaneous merchandise	39,563		3,367		41,584		2,000		86,514	
Shingles, woodenware, &c			54						54	
Sawed lumber Ft. B.M.	12,841,552		1,625,855		17,871,652		14,733,677		47,072,736	
Square timber Cub. ft.	572,000		660,000				84,200		1,316,200	
Firewood Cords.			210		9				219	
Staves No.			641,000						641,000	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	228	157,539	55	39,375	205	187,748	42	15,918	530	400,580
1904.	Tons.		Tons.		Tons.		Tons.		Tons.	
	116,794		33,302		14,269				164,365	
Wheat	12,768		7,814		95,362				116,444	
Corn	2,619		824		23,728				27,171	
Barley					16,261				16,261	
Oats					3				3	
Peas										
Rye	1,925		7,187		17,133		7,668		33,913	
Coal	34,907				1,925				36,832	
Miscellaneous merchandise	29,567				60,548				90,115	
Shingles, woodenware, &c										
Sawed lumber Ft. B.M.	15,077,382		854,811		32,751,541		9,572,655		58,259,389	
Square timber Cub. ft.	944,508		744,000				149,000		1,837,508	
Firewood Cords.					717				717	
Staves No.	634,000								634,000	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	252	182,373	91	48,692	319	286,656	64	29,120	726	546,841
1905.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat	188,706		18,575		28,757		2,512		238,550	
Corn	6,385		6,636		163,374		4,526		180,921	
Barley	6,870		1,451		47,111				55,432	
Oats	8,225		2,570		21,535		3,742		36,072	
Peas					76				76	
Rye					1,711				1,711	
Coal	18,756		35,324		28,330		8,678		91,088	
Iron ore	14,358		8,023						22,381	
Merchandise	29,375		7,485		74,975		3,126		114,961	
Shingles, woodenware, &c			2,748,941		2,325				2,325	
Sawed lumber Ft. B. M.	2,867,147				38,290,831		12,479,698		54,589,200	
Square timber Cub. ft.	355,000		951,524						538,000	
Firewood Cords.			183,000		900				900	

SESSIONAL PAPER No. 20a

D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &c.—*Concluded.*

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	328	238,690	121	66,355	305	310,622	43	15,758	797	631,425
1906.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat		250,493		34,355		35,578				320,436
Corn		8,177				202,250		1,378		49,306
Barley		8,546		5,046		17,854				31,446
Oats		21,900		16,083		11,323				49,306
Peas						11				11
Rye				5		1,406				1,411
Coal		30,455		47,242		24,190		9,356		111,243
Iron ore		5,862								5,862
Merchandise		35,383		7,009		110,263		50		152,705
Shingles, woodenware, &c.		16		37		851				904
Sawed lumber.....Ft. B. M.		3,471,514		235,624		25,711,196		10,769,755		40,188,089
Square timber.....Cub. ft.		375,000		200,000						575,000
Firewood.....Cords.		110		18		1,093				1,221
Staves.....No.						300,000				300,000
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	375	290,509	148	81,070	408	397,616	76	36,921	1,007	806,116
1907.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat		294,298		50,808		130,818		4,429		480,303
Corn		6,713		514		259,895		4,571		271,693
Barley		8,726		468		4,046				13,240
Oats		49,689		16,647		7,033				73,369
Peas						25				25
Rye						2,270				2,270
Coal		31,506		47,373		50,183		14,493		143,555
Iron ore		12,040		8,950						20,990
Merchandise		21,545		9,436		5,231		6,235		42,447
Shingles, woodenware, &c.						2,222				2,222
Sawed lumber.....Ft. B. M.						14,395,124		11,201,446		25,596,570
Square timber.....Cub. Ft.		558,090		323,000						881,090
Firewood.....Cords.						660				660
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	567	432,623	149	64,034	428	319,030	36	19,866	1180	835,553
1908.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat		505,151		39,001		183,101		3,498		730,751
Corn		2,405				124,997				127,402
Barley		19,775		1,133		10,264				31,172
Oats		30,091		643		2,689				33,423
Peas						40				40
Rye		742				5,925				6,667
Coal		39,733		42,656		57,448		8,344		148,181
Merchandise		26,815		14,783		14,410		13,686		69,694
Firewood.....Cords.				70		1,173				1,243
Sawed lumber.....Ft. B. M.						17,572,070		6,578,545		24,150,615
Square timber.....Cub. Ft.		221,300		313,000						534,300

WELLAND CANAL THROUGH FREIGHT—RECAPITULATION.

Welland Canal—West Bound Freight.

The total quantity of Through Freight passed Up the Welland Caual in Canadian and United States Vessels during the Season of Navigation in 1908 is as follows :—

Summary.	Tons.	Tons.
In Canadian steam vessels	142,517	
" sail "	11,686	
Total quantity in Canadian vessels		154,203
In United States steam vessels	255,990	
" sail "	7	
Total in United States vessels		255,997
Grand total freight passed Up the Welland Canal in Canadian and United States vessels		410,200

Statement of the Quantity of Through Freight passed Up and Down the Welland Canal during the Season of Navigation in 1908.

Summary.	Tons.	Tons.
In Canadian steam vessels up	142,517	
" " down	660,832	
Total in Canadian steam vessels		803,349
In Canadian sail vessels up	11,686	
" " down	106,286	
Total in Canadian sail vessels		117,972
Total quantity in Canadian vessels		921,321
In United States steam vessels up	255,990	
" " down	481,615	
Total in United States steam vessels		737,605
In United States sail vessels up	7	
" " down	36,496	
Total in United States sail vessels		36,503
Total quantity in United States vessels		774,108
Total in Canadian and United States vessels		1,695,429
	Down or East Bound.	Up or West Bound
In Canadian essels	767,118	154,203
In United States vessels	518,111	255,997
Total	1,285,229	410,200

E.—STATEMENT of Large Class of Vessels Lightened at the Welland Railway Elevator at Port Colborne, showing the Tonnage, Dimensions, Depth of Water, Number of Cargoes passed through the enlarged Welland Canal during the season of Navigation in 1908.

CANADIAN STEAM VESSELS.

Date of Arrival	Names of Vessels	Dimensions: Registered Tonnage	Dimensions: Length	Dimensions: Width of Beam	Dimensions: Depth of Hold	Depth of Water on Arrival: Forward	Depth of Water on Arrival: Aft	Original Cargo to the Welland Canal: Wheat	Barley	Barley.	Oats	Oats	Flax Seed	Flax Seed	Rolling Freight	Lightergo over Welland Railway.: Wheat	Barley.	Flax Seed.	Oats.	Lightergo over Welland Railway in Tons.: Wheat	Barley.	Flax Seed.	Oats.	Rolling Freight.	Grain Cargo and Rolling Freight through Welland Canal.: Wheat	Barley	Flax Seed.	Oats	Wheat.	Barley	Flax Seed	Oats	Rolling Freight.	Total Cargo through Canal	Depth Water Medium through Canal	Destination.	
1908		Tons	Ft. in	Ft. in	Ft. in	Ft. in	Ft. in	Bush	Tons	Bush.	Tons	Bush.	Tons.	Bush.	Tons	Tons	Bush.	Bush.	Bush	Bush	Tons.	Tons	Tons.	Tons	Tons	Bush	Bush.	Bush.	Bush	Tons	Tons.	Tons.	Tons	Tons	Tons	Ft. in	From	To
May	2 R. Crowe	1,004	252	44	22 9	16 1	16 1	37,464	2,025								23,934				719					73,591				2,206					2,466	14 1	Fort William	Kingston.
"	4 Stormont	1,758	256	45	25 6	16 4	16 4	58,119	2,549								13,458				404					74,981				2,241					2,793	14 1	"	"
"	5 Iroquois	1,852	260	45	26	16 8	16 8	101,970	3,060								24,699				741					71,274				2,419					2,589	14 1	"	"
"	6 Algonquin	3,124	248	46	26 6	15 2	15 2	76,258	2,279								10,089				303					69,949				2,256					2,559	14 1	"	"
"	7 Rosemount	1,760	253	43	24 3	16 1	16 4	89,267	2,407								14,189				426					66,922				1,981					2,407	14 1	"	"
"	8 Fairmount	1,181	253	42	...	16 6	16 6	91,209	2,737								22,464				669					68,925				2,068					2,868	14 1	"	"
"	9 Westmount	1,172	253	42	...	16 6	16 6	89,315	2,680								20,520				607					69,085				2,073					2,864	14 1	"	"
"	8 Glenmount	1,246	256	42 8	21	17 2	16 8	49,447	1,490					51,754	1,450		9,959				279					53,691			42,195	1,911		1,182			2,194	14 1	"	"
"	Sarnia	1,190	250	39	21	16	16	75,700	2,270												256					66,560				1,995					1,995	14	"	Montreal.
"	9 Marshall	1,291	256	42	24	15 3	15 3	89,848	2,697												640					69,546				2,087					2,087	14	"	Kingston.
"	9 Whitehall	906	250 4	37 3	25	14 2	15 2	63,000	1,890												298					53,993				1,620					1,918	14	"	"
"	10 Rosedale	927	254 3	38	22 6	16	18	46,374	1,392					34,183	958		13,121		4,178		394		117			33,290			30,905	1,928		841			1,879	14	"	Montreal.
"	11 Edmonton	1,431	256	42 6	24	17	15	16,674	501	76,053	1,826						22,147	10,371			663	249				67,853	87,682			501	1,577				2,078	14	Port Arthur	Kingston.
"	11 Turret Court	1,767	254	44	24 9	16 6	16 6	99,000	2,701								26,288				787					68,169				2,046					2,046	14	Fort William	"
"	12 Lambton	1,181	254	45	25	17	17	94,137	2,805								20,700				1,104					46,541			20,800	1,896					1,999	14	Port Arthur	Montreal
"	13 Hesketon	1,181	254	45	25	17	17	85,500	2,610					20,800	583						689					69,646				2,072					2,072	14	Duluth	Kingston
"	14 Westmount	1,172	253	42	...	16 10	17 6	92,000	2,761								22,264				664					72,479				2,175					2,175	14 1	Fort William	"
"	15 Winona	1,176	262	43	24	17 1	17 1	103,253	3,096								24,444				883					74,876				2,247					2,247	14 1	"	"
"	16 Bessemer	1,190	253	41	24 3	16 5	16 6	79,224	2,381								14,454				434					64,876				1,947					1,947	14	"	"
"	17 Newaygo	1,190	...	39	24	15 3	15 6	56,000	1,680								8,862			14,680	122			224		45,953				1,379					1,379	14 1	Duluth	Montreal.
"	18 Dunbar	1,191	256	42	25	16 6	16 6	31,335	941	8,709	198	38,963	548	23,500	658	34	3,565				110					27,479	8,259	23,960	24,878	831	198	655	45	54	1,731	14	Fort William	"
"	19 Rowena	962	255	45	22 6	18 9	15	61,740	1,852								3,334				98					58,406				1,754					1,754	14	"	"
July	20 Ionic	1,191	256	42	24	15	15	59,078	1,773								7,979				200					49,099				1,473					1,473	14	Port Arthur	"
Sept.	21 Peter Reid	1,172	256	44	25	14	15 9	79,208	2,377								3,077				93					76,131				2,284					2,284	14 2	"	Kingston.
"	22 Glenmount	1,246	256	42	24	16	16	91,011	2,731								13,782				413					68,251				2,048					2,048	14 1	Fort William	"
"	23 Edmonton	1,191	256	42	24	17 4	15 6	81,097	2,434								11,121				334					69,976				2,100					2,100	14	"	"
Aug.	24 Hesketon	1,191	256	42	24 3	18 1	18	91,000	2,731								10,424				313					74,579				2,148					2,148	14	Duluth	"
"	25 Hesketon	1,191	256	42	24 6	16	16	48,600	1,441			45,000	765				12,336				371					35,604			45,000	1,070		754			1,825	14	Fort William	Montreal
"	Stormont	1,758	258	45	25 6	16 5	16 5	97,000	2,925								21,337				642					74,105				2,224					2,224	14 1	"	Kingston.
"	26 Westmount	1,172	253	42	...	16 6	16 6	90,000	2,701								21,559				647					68,448				2,054					2,054	14	"	"
"	26 Neepawa	1,246	...	39	24	16 6	16 6	78,874	2,367								9,627				619					68,246				1,748					1,748	14	Port Arthur	Montreal.
"	Rosemount	1,181	253	42	24 3	16 8	16 8	97,078	2,910								17,078				534					62,849				1,879					1,879	14	Fort William	Kingston
"	27 Meaford	1,301	256	42	24	16 6	16 6	90,000	2,701								18,108				553					71,592				2,148					2,148	14 1	Duluth	"
"	27 Fairmount	1,181	253	42	24	16 6	16 6	90,120	2,705								20,363				611					69,176				2,074					2,074	14	Fort William	"
"	Glendale	1,191	256	42	24	16 7	16 5	84,275	2,528								16,441				494					67,774				2,034					2,034	14 2	"	"
"	13 Dunbar	1,191	256	42	25	16 6	16 6	84,200	2,530								13,793				479					69,253				2,081					2,081	14 1	"	"
"	28 Rosedale	1,191	256	42	24	16	16 2	85,242	1,991	57,708	1,385						9,980	9,626			301	291				36,302	48,083			701	1,154				1,945	14 2	"	"
"	Advance	1,191	256	42	24	16	15	40,232	1,208								8,343				130					35,710				1,072					1,072	14	Port Arthur	Montreal
"	29 Emerson	1,172	253	42	24	17	16	89,351	2,682								18,137				565					70,254				2,107					2,107	14	Fort William	"
"	16 Glenmount	1,246	256	42 6	24	16 6	16	93,484	2,851								22,193				665					72,848				2,186					2,186	14	"	"
"	30 Dunmore	1,172	253	42	24 5	16 6	17	91,498	2,733								22,207				668					68,196				2,064					2,064	14	"	"
"	31 Edmonton	1,441	311	42 6	24	15	15	44,655	1,341	54,978	1,249						11,072	6,541			533	153				30,005	45,635			1,098	1,694				2,101	14	"	"
"	32 Rosemount	1,181	253	42	24	16 2	16 6	97,466	2,926								22,744				683					74,722				2,243					2,243	14	"	Kingston.
"	26 Kenmount	1,246	256	43 5	24	16 8	16 6	97,571	2,859								22,639				689					72,482				2,179					2,179	14	"	"
"	Rosemont	1,181	253	41	24 3	16 2	16 2	79,459	2,395								19,393				576					60,624				1,825					1,825	14	"	"
"	29 Fairmount	1,181	253	42	24 3	16 3	16 8	89,184	2,674								22,050				662					67,464				2,042					2,042	14 1	"	"
"	Algonquin	1,172	253	42	24	14	15 8			97,428	2,340											265						80,422			2,075					2,075	14	"	"
"	33 Rosedale	1,172	256	42	24	16	16	85,721	2,566								17,521				526					68,090				2,046					2,046	14	"	"
"	Rosedale	925	254	35	22 6	16	16	75,689	2,272								17,538				527					68,102				2,045					2,045	14	"	Montreal
"	34 Hesketon	1,191	256	42	24 3	16 4	16 6	80,834	2,042								16,405				554					69,651				2,089					2,089	14 1	"	Kingston.
"	Rosemount	1,246	256	42 6	24	16 3	16 6	83,002	1,291					48,981	1,372		10,802		5,454		565		158			26,700			43,827	786					2,046	14	"	"
"	Rosedale	1,344	256	42	24	14	15 6	91,000	493								4,490	4,701			135	115				54,504	15,709			1,636	378				2,014	14 2	"	"
"	7 Newaygo	1,190	250	39	24	16	16	39,278	699			93,569	1,502				16,551			2,275	317			30		3,795			94,294	892		1,253			1,946	14	"	Montreal.
"	9 Fairmount	1,181	253	41	24	16 3	16 3	100,000	3,028								20,800				623					80,170				2,403					2,403	14 1	"	Kingston.
"	Rosemount	1,246	256	42 6	24	16 8	16	94,247	2,845								22,144				688					71,883				2,127					2,127	14	"	"
"	Westmount	1,172	253	42	24	16 6	16	90,234	2,707								20,141				626					70,963				2,093					2,093	14	"	"
"	11 Kenmount	1,246	256	43 5	25	17 7	17 5	97,429	2,864								21,993				688					73,593				2,206					2,206	14	"	"
"	12 Rosemont	1,181	253	41	24 3	16 1	16 2	75,861	2,343								19,146				605					68,965				1,896					1,896	14	"	"
"	13 Fairmont	1,181	253	42	24	16 10	16 4	90,955	2,687								21,800				688					67,449				2,023					2,023	14	"	"
"	Woodstock	906	250 1	37 3	21	15 2	15 9	32,641	980	26,140	628	16,004	256				6,458			4,881	194			83		20,196	26,149		10,119	786			174		1,287	14 2	"	Montreal.
"	17 Evelyn	1,152	253	42	24	16	16	95,121	1,956	40,091	964						16,527				508					58,241	40,001			1,148					2,104	14	"	Kingston.
"	Fairmont	1,181	253	42	24	16 6	16 6	80,000	2,671	10,000	241						16,072	6,901			499	166				72,398	3,099			2,172					2,247	14	"	"
"	18 Fairmont	1,181	253	42	24	16 10	15 11	31,932	956			38,000	1,066				13,842				356					38,402				956			1,066		1,951	13 1	"	"
"	35 Simcoe	1,250	253	42	24	16	16	93,000	2,851								18,548				587					75,462				2,264					2,264	14	"	"
"	24 Peavey	1,191	256	42	24	16	16			16,192	246			69,645	1,951			7,512	3,248			181	91					2,680	66,397		1,869				1,955	14	"	"
Dec.	7 Hesketon	1,191	256	42	24	16	16	109,000	3,691								19,010				574					80,990				2,430					2,430	14	"	Thorold
"	Algonquin	1,172	253	42	24	16	16	82,874	2,187								15,836				475					67,044				2,012					2,012	14	"	"
"	36 Emerald	1,441	311	42	24	15	14 4					130,000	2,211																									Toronto
"	11 Kinsale	1,498	258	45	25	16 4	16 6							102,709	2,889				27,189	3,099			762	53					75,610	126,381		2,118	2,158		2,158	14	"	Prescott
								4,962,683	146,926	398,304	9,587	419,632	7,138	353,602	9,052	34	1,146,244	56,544	40,628	23,945	33,253	1,360	1,201	488		3,856,809	341,660	302,934	385,687	115,704	8,276	8,101	6,730	34	5,049,135			

QUANTITY of Grain discharged at Port Colborne during the season of 1908, which did not enter the Welland Canal.

Date.	Vessels.	Destination.	Bushels.
May 11	Steamer Winona	Fort William to Port Colborne	69,753
June 12	" Algonquin	" "	78,229
July 4	"	Port Arthur "	52,693
" 16	Brg J. P. Whitney.	Dunnville "	5,662
" 22	Steamer Algonquin	Fort William "	59,222
" 30	Brg J. P. Whitney.	Dunnville	6,081
Aug 1	Steamer Midland Prince	Duluth	314,200
" 25	"	Fort William	49,951
Dec. 9	" Wasaga	"	56,259
" 16	" Beaverton	"	29,344
		Total	715,447

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, 22nd March 1908.

RICHARD DEVLIN,
Compiler of Canal Statistics.

F.—STATEMENT showing the Quantity of Freight passed Eastward, from Lake Erie, through the whole length of the Welland and St. Lawrence canals, to Montreal, during the season of navigation 1896 to 1908.

Articles.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 3.													
Cement and water lime	12								35				
Clay, lime and sand		38	52	15	15					22			
Iron, railway							50		8,170	10			
" pig	5				508								
" all other	2,020	7,564	6,217	5,063	4,292	1,178	5,785	2,542	1,651	384	269	124	553
Steel	542	375	1,351	3,000	5,420				16	48			
Stone, for cutting	200												
Apples	1,263								1			9,936	
Barley	240		3,960	596	1,288			2,206	9,697	43,607	21,196	105,984	24,318
Corn	182,330	267,583	310,498	150,999	109,359	14,319	1,719	123,864	55,021	84,204	55,559		10,454
Flaxseed		3,293	5,687			4,965		3,643	212	15,694	80,570	49,159	27,500
Flour	11,964	1,029	653	4,229	1,595	1,400	6,755	16,151	24,662	14,571	9,174	3,730	5,028
Meal, all kinds						35		348	57	270	60		156
Oats	12,373	6,847	3,975	10,250	8,925	1,584	1,442	2,438		21,404	37,164	66,941	28,081
Oil cake						1,083		462	7,846	9,229			
Pease	3,020	2,078	260		115			63					
Rye	8,323	8,435	15,488	923	3,078	2,961	4,079	4,260		1,711	1,405	2,266	6,662
Salt		216	144	183		50		132	615	168	75	143	419
Seeds, all kinds	20			200								29	
Hay, pressed				96		246							
Tobacco, raw		51				23							
Wheat	255,198	278,498	184,154	169,978	121,896	132,702	200,975	226,746	133,528	190,505	289,611	450,446	686,626
All other agricultural products, vegetables	29		56	32									
Hides, skins, horns and hoofs									10		2		
Horses	1	1	4	1									
Lard and lard oil						1,155				2,847	4,810		
Meats, all kinds						114							
Pork	1					34							524
Tallow								3		53			
All other agricultural products, animal									1				
Total, class 3	477,541	576,008	532,499	345,565	256,491	161,849	220,805	382,858	241,522	384,727	499,895	688,749	790,321
Class 4.													
Agricultural implements				3		1,785	13	58	17				
Ashes	94	133	73	55	25	3		2	16				
Bricks													1,543

F.—STATEMENT showing the Quantity of Freight passed Eastward, from Lake Erie, through the whole length of the Welland and St. Lawrence Canals, to Montreal, &c.—*Concluded.*

Articles.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 4—Con.													
Crockery	5									93			
Furniture		1			1	5		3	6		6		
Glass, all kinds	9	53	75	16	6	1		15	3	21	11	4	
Molasses	167	9	56	159			54	240		820			
Nails				1				19		64			3
Oil	23	112	1,141	7,143	15,647	14,987	12,091	14,619	12,848	20,700	19,995	22,111	30,002
Paint						17		5					
Pitch and tar										53		101	
Rags	4							4					
Rosin								20					
Soda ash						4				59	72	15	
Sugar	1					112				2,019			
Tin									87	53			
Tobacco				96						204			
White lead					16								
Whisky, beer and other spirits		46	4	74	11	32		2	766	635	614	1,224	1,056
Merchandise not enumerated	376	1,226	866	518	92	2,420	419	582	713	851	466	2,294	2,126
Total, class 4	679	1,580	2,215	7,969	15,798	19,366	12,577	15,569	14,456	25,572	21,164	25,749	34,730
Class 5.													
Barrels, empty				1	182	66	15						
Hoops		257											
Sawed lumber	657	478	3,065	924	15,760	2,635	1,085			3,957	100		
Staves, pipe and barrel		4,716								394	2,400		
" West India and pipe													
Timber, square, in vessels									1,544	1,260	1,500	4,180	
" in rafts	1,200	1,207	329	26									
Woodenware							17						
Total, class 5	1,857	6,658	3,394	951	15,942	3,205	1,117		1,938	5,217	4,000	4,180	
Special Class.													
Coal										29,351	29,172	70,489	42,075
Iron ore							15,976		17,362	3,837			
Stone, all kinds													1,272
Total, special class										33,188	29,172	70,489	43,367
Grand total	480,077	584,246	538,108	354,485	28,231	184,420	250,475	398,427	275,278	448,704	554,231	789,167	869,398

G.—Statement showing the Quantity of Freight passed Westward from Montreal, through the whole length of the St. Lawrence and Welland Canal to Lake Erie, during the Seasons of Navigation in 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906 and 1907.

Articles.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904	1905.	1906.	1907.
	Tons	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 3.													
Bricks	24	15	70	70	24	49	196	22	80	115	132		556
Brimestone							5	20	23	12			
Cement and water lime	1,859	1,686	837	996	997	1,931	2,916	178	3,924	39	181	88	13
Clay, lime and sand			4	144	8	4	2	1	181				100
Cotton, raw									23				
Fish		11	10	9	10	8	8		8	4			39
Gypsum					4								
Iron, railway		1,687				74	748	11,735	39,641	283	126	7,289	4,119
" pig	56	28	6			3		558	273		312	680	7,655
" all other	1,831	727	559	699	1,318	1,428	4,950	2,904	5,845	3,782	3,633	8,235	6,987
Salt	932	822	25	35		48	75	4	87	99	150	17	
Steel	528			19	18		3	11	332	58	192	111	2,561
Stone for cutting		4	62							41			
Flour							16				18		
Hay	124												30
Meals									17	25			
Oats													
Potatoes													
Seeds, all kinds	25	99	121	56	121	218	302	58	325	164	35	17	
Tobacco, raw								1	2				
Agricultural products not enumerated, vegetables	26		4				1	1			127		
Hides and skins	26							16	6				
Horses		1		1									
Lard and lard oil	1			2				11			28	20	1
Meats other than pork									1	25			15
Pork						1							
Wool													
All other articles not enumerated													
Total, class 3	5,432	5,080	1,698	2,031	2,500	3,764	9,222	15,520	50,768	4,647	4,934	16,457	22,076
Class 4.													
Agricultural implements												5	
Ashes, pot and pearl			1						2				
Crockery and earthenware	12	83	4	33	3	5			32	291	155	294	456
Dye woods, &c.										2			2

G.—STATEMENT showing the Quantity of Freight passed Westward from Montreal, through the whole length of the St. Lawrence and Welland Canal to Lake Erie, &c.—*Continued.*

Articles.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Classe 4—Concluded.													
Furniture			2			1			1	5	2	1	35
Glass, all kinds	394	612	799	150	299	456	612	1,384	1,207	1,671	1,641	2,519	3,534
Manilla										34	93	37	15
Marble												35	
Molasses	20	1					1		6		1		50
Nails	1,149	409	129	229	518	30	675	1,292	2,878	2,009	3,061	4,011	3,331
Oil, in barrels	31	33	12	15	21	74	83	14	16	1,418	120	148	155
Paint	75	49	20	35	2	12	69	97	158	202	367	412	295
Pitch and tar	67	60	20	37	6	21	27	27	58	199	5	239	
Rags					14			1	29		15		50
Resin					15				1				25
Soda ash	84	74	249	88	108	69	169	201	264	387	28	310	37
Stone, wrought		17	25	31									5
Sugar	1,430	1,873	311	566	1,596	430	810	1,314	204	52	1,168	1,153	6,046
Tin	396	395	359	237	159	117	338	506	209	362	928	1,365	1,173
Turpentine							1	2	1				1
White lead	7	10	5		1	4	11	37	80	82	80	304	283
Whiting	113	56	104	93	89	39	49	61	22	33	158	93	18
Whisky, beer, &c	77	51	93	98	178	295	131	182	452	432	384	483	1,040
Merchandise not enumerated	1,268	1,247	711	793	482	744	1,516	1,049	3,674	6,200	15,360	11,707	16,498
Total, class 4	5,123	4,970	2,844	2,405	3,491	2,447	4,492	6,169	9,294	13,379	23,566	23,116	33,049
Class 5.													
Barrels, empty												54,906	
Firewood in vessels								3,600	40,026	40,425	43,982	2,307	2,337
Pulpwood													101,989
Lumber, sawn, in vesssels													
Railway ties in vessels									611				
Woodenware												5	
Total, class 5								3,600	40,637	40,425	43,982	57,218	104,326
Special Class.													
Coal										10,200			
Iron ore										2,861			
Total, special class										13,061			
Grand total	10,555	10,050	4,542	4,436	5,991	6,211	13,714	25,289	100,699	71,512	72,482	96,791	159,451

H.—Statement showing the Quantity of Freight passed Eastward through the Welland Canal, from United States Ports to United States Ports, during the Season of Navigation from 1896 to 1908 inclusive.

Articles.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 3.													
Bricks		845											
Cement and water lime			300		18								
Fish												20	
Iron, railway		965	770										
" all other			324	1,008	714		30			1	27	30	
Salt				549		105							
Steel	498		2,951	13,522	3,110						2	509	9,086
Stone for cutting													
Apples													
Barley	11,128	14,173	6,909	2,424	2,402	7,119	7,418	11,433	16,621	9,197	9,266	2,812	7,148
Corn	175,094	169,057	150,667	81,777	60,545	55,531	66,111	108,917	60,964	93,622	135,240	121,474	99,830
Flour	16,224	7,237	4,212	6,118	7,966	17,168	13,785	6,082	8,556	24,054	15,215	18,898	17,694
Hay, pressed		301								200			
Meal, all kinds	46,456	41,644	22,626	18,198	14,244	14,016	12,675	13,546	13,076	9,606	10,668	21,976	21,353
Marble										87			
Nails										1			
Oil cake					2,705	1,302	110	740	16,197	228		114	
Oats	16,137	14,969	12,729	19,526	39,706	26,344	10,006	6,112	3	10,892	11,323	4,741	2,070
Pease			45		4			22		76	11	25	40
Potatoes													
Rye	490		1,197	923	2,149			4,174				2	2
Flax seed				200				1,594			756		
Seeds, all kinds	78	299	44	11			10	27		43	3	17	
Tobacco						23							
Wheat	34,878	28,919	11,268	12,926	18,771	23,557	32,639	15,436	14,269	15,483	13,410	21,892	24,651
Agricultural products, vegetables					6	10		1			1	7	
Hides and skins, &c	41	23											21
Horses	3	3	2		4			2					
Lard and lard oil, &c	1,348	1,444	3,671	864	1,588	1,680	2,413				22	86	
Meats, other than pork													
Pork	390	243	1,271	343	17	970	632	152	379	273	268	429	
Sheep													190
Tallow			359	201	631	119							
Wood	900	197	89	130		3	752	482	134	21	89	30	
Total, class 3	303,665	280,319	219,434	158,720	4	147,947	146,581	168,720	130,499	163,784	196,301	196,062	182,085
Class 4.													
Agricultural implements							399		396	552	494		2
Crockery and earthenware												5	
Furniture			2	7		3	17				1		

H.—Statement showing the Quantity of Freight passed Eastward through the Welland Canal, from United States Ports to United States Ports, during the Season of Navigation from 1896 to 1908 inclusive.—*Concluded.*

Articles.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 4—Con.													
Marble						4							
Molasses				8	57								
Nails				11								3	
Oil, in barrels	1,005	198	119	367	17	22	1,594	2,000	1			8	15
Paint			3	2	36				17	42	1	1	1
Rags				1				4		4			
Soda ash													
Stone, wrought													
Sugar	165	31			154	448	280		53	53	840	26,075	
White lead										7		4	
Whiting												21	
Whisky, beer and all other spirits			34	168	1	1		3				30	
Merchandise	3,990	3,591	3,828	6,219	7,889	3,327	1,928	2,010	1,554	2,008	2,324	41,621	1,857
Total, class 4	5,160	3,820	3,986	6,783	8,164	3,805	4,218	4,017	2,021	2,666	3,660	67,768	1,875
Class 5.													
Empty barrels	10				5	282				3	2	1	
Firewood, in vessels	165						4		717	2,700	3,609	1,980	3,509
Lumber, sawn, in vessels	75,515	68,280	52,844	57,695	55,128	38,685	72,806	48,337	30,194	15,726	27,701	14,314	21,571
Masts and spars, in vessels		403											
Hop poles									154				
Railway ties in vessels									652	2,248		2,151	478
Shingles										62	53	70	
Split posts										12			
Staves, salt barrels											1,500		
Timber, square, in vessels		1,040											
Woodenware, &c	12	1											
Total, class 5	75,702	69,724	52,844	57,695	55,133	38,367	72,810	48,337	31,717	20,751	32,865	18,516	25,558
Special class.													
Coal	1,255		759	2,293	992	357	501		1,100	3,346	4,400	110,347	
Stone, not suitable for cutting													
Kryolite												2,734	
Iron ore												1,316	
Total, special class	1,255		759	2,293	992	357	501		1,100	3,346	4,400	114,397	
Grand total	385,782	353,863	277,023	225,491	218,969	190,476	224,110	221,074	165,337	190,547	237,226	396,743	209,518

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TABLE I.—Number of Vessels passed DOWN the Welland Canal with Cargoes of Grain for Montreal; the quantity transhipped at Kingston, and the quantity taken to Montreal, for the Season of Navigation in 1908.

—	Number of Cargoes.	Total Number.
Wheat	210	
Corn	1	
Total		211
	Tons.	Tons.
Quantity of wheat through the Welland Canal bound for Montreal	344,532	
" corn " " "	440	
Total through the Welland Canal		344,972
Quantity of the above transhipped at Kingston—		
Wheat	1,239	
Corn		
Total transhipped		1,259
Quantity of the above cargoes taken to Montreal in vessels in which it arrived at Kingston—		
Wheat	343,293	
Corn	440	
Total quantity to Montreal		343,733
Grand total		344,972

J.—STATEMENT showing the Quantity of Grain passed DOWN the Welland Canal in Canadian and United States vessels entering the Canal at Port Colborne, during the Season of Navigation in 1908.

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	567	432,623	149	64,034	428	319,030	36	19,866	1180	835,553
Barley		19,775		1,133		10,264				31,172
Corn		2,405				124,997				127,402
Oats		30,091		643		2,689				33,423
Pease						40				40
Rye		742				5,925				6,667
Wheat		505,151		39,001		183,101		3,498		730,751
Total		558,164		40,777		327,016		3,498		929,455

Cargoes in Canadian Vessels,	Steam,	total quantity		558,164
" " "	Sail	"		40,777
" United States "	Steam	"		327,016
" " "	Sail	"		3,498

K.—STATEMENT of the Quantity of Grain arrived at Kingston, Ogdensburg and Prescott, in Vessels which passed DOWN the Welland Canal, during the Season of Navigation in 1908.

Summary.		Tons.	Tons.
Canadian Steam—330 cargoes of grain		558,164	
" Sail 25 "		40,777	
Total in Canadian vessels			598,941
United States Steam—269 cargoes of grain		327,016	
" Sail 2 "		3,498	
Total in United States vessels			330,514
Total in Canadian and United States vessels			929,455
Distributed as follows:—			
187 Canadian and 54 United States vessels arrived at Kingston, discharged part of their cargoes, taking the balance to Montreal			384,802
222 vessels arrived at Kingston and discharged all their cargoes, as follows:—			
181 cargoes in Canadian vessels	300,772		
41 " United States vessels	68,626		
Quantity transhipped and taken to Montreal			369,398
" taken to Ogdensburg			138,972
" remaining at Canadian ports			36,283
Total			929,455

L—Comparative Statement of the Quantity of Grain passed Down the Welland Canal to Kingston and Ogdensburg, during the Seasons of Navigation in 1907 and 1908.

	1907.		1908.	
	No. of Cargoes.	Tons.	No. of Cargoes.	Tons.
Quantity arrived at Kingston in Canadian vessels	255	427,813	355	598,941
Quantity arrived at Kingston and Ogdensburg in United States vessels	263	413,087	271	330,514
Total	518	840,900	626	929,455
Quantity transhipped at Kingston and Ogdensburg in Canadian vessels for Montreal		466,777		*369,398
Quantity taken to Montreal in vessels in which it arrived at Kingston		168,796		384,802
Quantity remaining at Kingston, Ogdensburg and Cardinal		205,327		175,255
Total		840,900		929,455

*Of this quantity 960 tons were transhipped from Kingston, being grain of 1907. 241 vessels took their cargoes through in 1908, against 134 in 1907. 222 vessels discharged all their cargoes in 1908, against 287 in 1907.

M.—The quantity of Coal passed through the Welland Canal during a series of years from 1885 to 1908, inclusive, is as follows :—

Years	From Canadian Ports to Canadian Ports.	From Canadian Ports to Canadian Ports.	From United States Ports to United States Ports.		From United States Ports to Canadian Ports.		Total.
	Up.	Down.	Up.	Down.	Up.	Down.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1885			193,442	4,974	10,321	31,350	240,087
1886			184,564	5,400	22,187	49,724	261,875
1887			81,617	1,163	26,775	25,968	135,523
1888			172,381	878	17,365	27,183	217,807
1889			226,352	1,124	12,036	25,931	265,443
1890	80		116,616	615	17,280	22,781	202,372
1891			185,190	1,382	17,374	20,698	224,644
1892			183,244	651	12,391	15,330	211,616
1893			204,704	2,123	8,325	17,944	233,096
1894			187,794	727	1,269	13,947	203,737
1895	4		148,887	603	1,565	7,807	158,866
1896	20	210	206,093	1,255	4,127	11,740	223,445
1897		4	165,143		1,277	9,799	176,223
1898			156,055	759	986	4,536	162,336
1899			86,638	2,293	525	8,276	97,732
1900	8		45,032	992		1,360	47,392
1901			46,345	357	456	2,322	49,480
1902			12,410	501	65	51,037	64,013
1903	3		113,076		4,796	30,009	147,884
1904	2,919		62,782	1,100	3,711	32,813	103,325
1905			70,118	3,346	11,436	37,742	172,642
1906	60		29,123	4,400	7,161	106,843	147,587
1907	2,857		110,347		10,453	143,555	267,212
1908	4,401		158,351		5,988	148,181	316,921

N.—STATEMENT showing the quantity of Coal passed through the whole length of the St. Lawrence Canal during the seasons of 1885 to 1908, inclusive.

YEARS.	Quantity passed up.	Quantity passed down to Montreal.	Total Quantity passed up and down.
	Tons.	Tons.	Tons.
1885	5,035	122,829	127,864
1886	3,301	118,802	122,103
1887	7,579	121,618	129,197
1888	8,341	123,050	131,391
1889	5,360	124,290	129,650
1890	6,538	135,168	141,706
1891	7,951	141,701	149,652
1892	7,543	157,134	164,677
1893	2,285	147,139	149,424
1894	16,213	169,552	185,765
1895	.....	165,151	165,151
1896	689	161,551	162,240
1897	40	164,963	165,003
1898	400	175,609	176,009
1899	448	201,546	201,994
1900	10	280,169	280,179
1901	2,765	298,245	301,010
1902	9,231	95,702	104,933
1903	30	290,548	290,578
1904	9,670	320,973	330,643
1905	8,518	345,589	354,107
1906	6,989	313,080	320,069
1907	1,281	406,978	408,259
1908	23,939	448,140	472,079

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O.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &c.

RECAPITULATION.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on the south side of Lake Ontario.
1897.	Tonnes.	Tonnes.	Tonnes.
Barley	.. . .	.....	14,173
Corn	264,396	11,103	115,689
Oats	6,774	3,046	15,233
Pease	2,078	3	.....
Rye	8,435	48	.....
Wheat	278,498	39,057	12,661
Total grain	*560,254	53,257	157,756
Other articles	20,793	114,989	122,207
Total	581,047	166,2 46	285,963
1898.			
Barley	3,960	1,417	6,909
Corn	310,498	13,338	116,317
Oats	3.975	625	12,729
Pease	260	.....	45
Rye	16,133	39	.....
Wheat	184,706	15,860	8,612
Total grain	†519,532	31,279	144,612
Other articles	19,773	79,614	114,259
Total	539,305	110,893	258,871
1899.			
Barley	568	.. ..	1,828
Corn	150,999	16,594	43,854
Oats	10,250	1	13,139
Pease	....	....	... .
Rye	923	....	.....
Wheat	169,978	24,602	9,190
Total grain	‡ 332,736	40,197	68,011
Other articles	21,739	68,671	104,727
Total	354,485	108,958	172,732
1900.			
Barley	1,288	563	1,598
Corn	109,358	9,844	44,406
Oats	8,925	348	30,840
Pease	115	....	4
Rye	3,078	160	300
Wheat	121,896	6,610	7,541
Total grain	**244,661	17,525	84,589
Other articles	43,670	95,680	93,287
Total	288,231	113,205	177,876

* Of this quantity, 7,695 tons came down in 1896 and were transhipped to Montreal in 1897.
† Of this quantity, 6,550 tons came down in 1897 and were transhipped in 1898.
‡ Of this quantity, 14,077 tons came down in 1898 and were transhipped to Montreal in 1899.
** Of this quantity, 12,171 tons came down in 1899 and were transhipped to Montreal in 1900.

O.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

RECAPITULATION—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on the south side of Lake Ontario.
1901.	Tons.	Tons.	Tons.
Barley			
Corn	14,319	4,828	49,609
Oats	1,584	853	25,704
Pease			
Rye	2,961		
Wheat	132,702	8,051	9,057
Total grain	†151,566	13,732	83,370
Other articles	32,854	128,614	91,799
Total	184,420	142,346	175,169
1902.			
Barley			7,418
Corn	1,719	10,335	55,583
Oats	1,412		9,764
Pease			
Rye	4,079		
Wheat	200,975	12,452	8,389
Total grain	‡208,215	22,787	81,165
Other articles	42,260	32,946	179,914
Total	250,475	55,733	261,078
1903.			
Barley	2,206	1,017	11,433
Corn	116,223	13,846	80,689
Oats	2,438		5,315
Pease	63		22
Rye	4,200		644
Wheat	226,746	14,199	13,725
Total grain	§351,936	29,062	111,828
Other articles	38,850	82,298	101,621
Total	390,786	111,360	213,449
1904.			
Barley	9,697	853	16,621
Corn	55,021	3,950	57,473
Oats			16,497
Pease			3
Rye			
Wheat	*133,528	18,908	11,929
Total grain	198,246	23,711	102,523
Other articles	77,031	80,092	138,475
Total	375,277	103,803	240,998

† Of this quantity, 9,324 tons came down in 1900 and were transhipped to Montreal in 1901.
‡ Of this quantity, 6,096 tons came down in 1901 and were transhipped to Montreal in 1902.
§ Of this quantity, 2,890 tons came down in 1902 and were transhipped in 1903.
* Of this quantity, 4,014 tons were transhipped to Montreal, being grain of 1903.

O.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &c.—*Concluded.*

RECAPITULATION—*Concluded.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on the south side of Lake Ontario.
1905.	Tons.	Tons.	Tons.
Barley	43,607	2,628	9,197
Corn	84,204	3,095	93,622
Oats	21,404	3,776	16,892
Pease	.....	.....	76
Rye	1,711	.....	.....
Wheat	190,505	32,562	15,483
Total grain	**341,431	42,061	129,270
Other articles	107,273	123,225	104,747
Total	448,704	165,286	234,017
1906.			
Barley	21,196	984	9,266
Corn	55,559	15,688	140,558
Oats	37,164	819	11,323
Pease	.....	11	.....
Rye	1,405	6	.....
Wheat	***289,611	15,843	14,972
Total grain	404,935	33,351	176,119
Other articles	118,224	176,277	59,884
Total	523,159	209,628	236,003
1907.			
Barley	9,936	492	2,812
Corn	106,299	31,901	133,493
Oats	67,063	1,565	4,741
Pease	.....	.....	25
Rye	2,266	2	2
Wheat	*450,009	8,072	22,222
Total grain	635,573	42,032	163,295
Other articles	153,594	126,423	93,127
Total	789,167	168,455	256,422
1908.			
Barley	24,318	3,546	3,308
Corn	10,454	11,489	105,459
Oats	28,081	3,272	2,070
Pease	.....	.....	40
Rye	6,662	3	2
Wheat	†686,626	19,832	24,293
Total grain	756,141	38,142	135,172
Other articles	108,785	162,378	91,875
Total	864,926	200,520	227,047

** Of this quantity, 2,809 tons were transhipped to Montreal, being grain of 1904.
*** Of this quantity, 4,191 tons were transhipped to Montreal, being grain of 1905.
* Of this quantity, 2,994 tons were transhipped to Montreal, being grain of 1906.
† Of this quantity, 960 tons were transhipped to Montreal, being grain of 1907.

TABLE 1.—COMPARATIVE STATEMENT of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation 1907 and 1908.

Canals.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		United States.	Canadian.
1907.													
Welland	91,495	452,519	110,556	26,773	177,660	219,083	10,453	525,593	390,164	1,223,968	1,614,132		
St. Lawrence	501,346	885,006	264,292	124	232	2,515	18,242	428,709	784,112	1,316,354	2,100,466		
Chambly	4,817	10,227	483,423					126,815	488,240	137,042	625,282		
Ottawa	324	284,428				53,098			324	337,526	337,850		
Rideau	34,161	32,634	4,735	1,644				9,195	38,896	43,473	82,369		
St. Peter's	25,756	47,411							25,756	47,411	73,167		
Trent Valley	13,625	56,181							13,625	56,181	69,806		
Murray	11,960	13,500	390					26,492	12,350	40,052	52,402		
Sault Ste. Marie	351,249	1,380,192	28,296	197,597	1,814,067	10,786,182	790,674	239,908	2,984,286	12,603,879	15,588,165		
Grand total	1,034,733	3,162,158	891,692	226,138	1,991,959	11,060,878	819,369	1,356,712	4,737,753	15,805,886	20,543,639		
1908.													
Welland	128,077	571,961	35,370	15,278	239,136	209,518	8,377	495,736	410,960	1,292,493	1,703,453	927,208	776,245
St. Lawrence	434,906	839,881	140,162	198	753	1,227	6,635	583,340	584,456	1,424,646	2,009,102	747,451	1,261,651
Chambly	4,160	10,730	364,774					123,612	368,934	134,342	503,276	123,602	379,674
Ottawa	2,358	226,623		28,855				691	2,358	256,169	258,527		258,527
Rideau	39,570	31,713	1,998	4,051				12,308	41,568	48,072	89,640	12,121	77,519
St. Peter's	22,420	49,595							22,420	49,595	72,015		72,015
Trent Valley	11,840	69,850							11,840	69,850	81,690		81,690
Murray	6,717	5,380	492	6				13,306	7,209	18,692	25,901	13,306	12,595
Sault Ste. Marie	378,198	1,486,689	17,940	230,333	1,464,421	8,008,121	955,288	218,226	2,815,847	9,943,369	12,759,216	10,666,985	2,092,231
Grand total	1,028,246	3,292,422	560,736	278,721	1,704,310	8,218,866	972,300	1,447,219	4,265,592	13,237,228	17,502,820	12,490,673	5,012,147

TABLE No. 2.—STATEMENT showing the Number, Tonnage and Nationality of Vessels passed through the several Canals during the Season of Navigation 1908.

Vessels.	Total Number of Trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
CANADIAN VESSELS.												
Steam and Sail.												
Welland	1,531	361,107	368,644	129,913	2,736	2,847		6,114	120,876	499,981	492,256	992,237
St. Lawrence	6,598	1,101,117	894,027	64,735	230	183		599	123,389	1,166,634	1,017,646	2,184,280
Chambly	685	29,698	30,531	6,887					7,097	36,585	37,628	74,213
Ottawa	1,773	36,436	176,035	150	2,562					36,586	178,597	215,183
Rideau	7,832	91,587	92,381	438					1,612	92,025	93,993	186,018
St. Peter's	1,380	47,772	47,778							47,772	47,788	95,560
Trent Valley	5,025	97,947	127,872							97,947	127,872	225,819
Murray	927	66,706	61,272	39,629				566	36,074	106,901	97,346	204,247
Sault Ste. Marie	3,289	894,406	949,589	76,575	221,787	2,027	7,844	341,665	109,339	1,314,673	1,288,559	2,603,232
Total	29,040	2,726,776	2,748,139	318,327	227,315	5,057	7,844	348,944	398,387	3,399,104	3,381,685	6,780,789
UNITED STATES VESSELS.												
Welland	820	65	273	81,258	5,087	248,177	174,939	2,244	158,891	331,744	339,190	670,934
St. Lawrence	1,427	25,908	16,761	204,232	1,237	17,907	16,741	16,590	216,891	264,637	251,630	516,267
Chambly	2,909	25	1,555	131,816		32			147,302	131,873	148,857	280,730
Ottawa	109		97		9,814			193	493	193	10,404	10,597
Rideau	149	1,000	1,483	173	497				769	1,173	2,749	3,922
St. Peter's												
Trent Valley												
Murray	71	599	175	489				65	1,706	1,153	1,881	3,034
Sault Ste. Marie	2,004	26,990	12,361	24,805	107,485	2,709,508	3,950,712	193,743	10,051	2,955,046	4,080,609	7,035,655
Total United States	7,489	54,587	32,705	442,773	124,120	2,975,624	4,142,392	212,835	536,103	3,685,819	4,835,320	8,521,139
Grand total Canadian and U. S.	36,529	2,781,363	2,780,844	761,100	351,435	2,980,681	4,150,236	561,779	934,490	7,084,923	8,217,005	15,301,928

TABLE No. 3.—SUMMARY STATEMENT showing the Number, Tonnage and Nationality December

Vessels.	Total Number of Trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.	
		Up.	Down.	Up.	Down.
WELLAND CANAL.					
Canadian vessels, steam	1,180	323,565	327,354	102,300	2,736
" sail	351	37,542	41,290	27,613	
Total Canadian	1,531	361,107	368,644	129,913	2,736
United States vessels, steam	753	64	267	70,292	3,323
" sail	67	1	6	10,966	1,764
Total United States	820	65	273	81,258	5,087
Grand total, Welland Canal	2,351	361,172	368,917	211,171	7,823
ST. LAWRENCE CANALS.					
Canadian vessels, steam	3,435	557,647	445,285	44,492	230
" sail	3,163	543,470	448,742	20,243	
Total Canadian	6,598	1,101,117	894,027	64,735	230
United States vessels, steam	1,007	23,500	9,528	141,739	935
" sail	420	2,408	7,233	62,493	302
Total United States	1,427	25,908	16,761	204,232	1,237
Grand total, St. Lawrence Canals	8,025	1,127,025	910,788	268,967	1,467
CHAMBLY CANAL.					
Canadian vessels, steam	333	24,420	24,612	27	
" sail	352	5,278	5,919	6,860	
Total Canadian	685	29,698	30,531	6,887	
United States vessels, steam	91	20	4	616	
" sail	2,818	5	1,551	131,200	
Total United States	2,909	25	1,555	131,816	
Grand total, Chambly Canal	3,594	29,723	32,086	138,703	
OTTAWA CANALS.					
Canadian vessels, steam	921	33,397	77,024	150	
" sail	852	3,039	99,011		2,562
Total Canadian	1,773	36,436	176,035	150	2,562
United States vessels, steam	2				36
" sail	107		97		9,778
Total United States	109		97		9,814
Grand total, Ottawa Canals	1,882	36,436	176,132	150	12,376
RIDEAU CANAL.					
Canadian vessels, steam	5,864	71,191	71,010	140	
" sail	1,968	20,396	21,371	298	
Total Canadian	7,832	91,587	92,381	438	

of Vessels passed through all the Canals during the Season of Navigation ended 31, 1908.

From United States to Uuited States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
Up.	Down.	Up.	Down.	Up.	Down.	
2,604		6,114	92,689	434,583	422,779	857,362
243			28,187	65,398	69,477	134,875
2,847		6,114	120,876	499,981	492,256	992,237
243,120	172,732	1,656	144,523	315,132	320,845	635,977
5,057	2,207	588	14,368	16,612	18,345	34,957
248,177	174,939	2,244	158,891	331,744	339,190	670,934
251,024	174,939	8,358	279,767	831,725	831,446	1,663,171
183		157	96,203	602,479	541,718	1,144,197
		442	27,186	564,155	475,928	1,040,083
183		599	123,389	1,166,634	1,017,646	2,184,280
17,310	16,431	1,135	165,923	183,684	192,817	376,501
597	310	15,455	50,968	80,953	58,813	139,766
17,907	16,741	16,590	216,891	264,637	251,630	516,267
18,090	16,741	17,189	340,280	1,431,271	1,269,276	2,700,547
			62	24,447	24,674	49,121
			7,035	12,138	12,954	25,092
			7,097	36,585	37,628	74,213
32			1,342	668	1,346	2,014
			145,960	131,205	147,511	278,716
32			147,302	131,873	148,857	280,730
32			154,399	168,458	186,485	354,943
				33,547	77,024	110,571
				3,039	101,573	104,612
				36,586	178,597	215,183
					36	36
		193	493	193	10,368	10,561
		193	493	193	10,404	10,597
		193	493	36,779	189,001	225,780
			1,205	71,331	72,215	143,546
			407	20,694	21,778	42,472
			1,612	92,025	93,993	186,018

TABLE No. 3.—SUMMARY STATEMENT showing the Number, Tonnage and Nationality December 31,

Vessels.	Total Number of Trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.	
		Up.	Down.	Up.	Down.
RIDEAU CANAL—*Con.*					
United States vessels, steam	60	95	204	45	2
" sail	89	905	1,279	128	495
Total United States	149	1,000	1,483	173	497
Grand total, Rideau Canal	7,981	92,587	93,864	611	497
ST. PETER'S CANAL.					
Canadian vessels, steam	234	13,772	13,151	.....	.....
" sail	1,146	34,000	34,637	.....	.....
Total Canadian	1,380	47,772	47,788	.....	.....
United States vessels, steam	.....	.....	.....	.....	.....
" sail	.....	.....	.....	.....	.....
Total United States	.....	.....	.....	.....	.....
Grand total, St. Peter's Canal	1,380	47,772	47,788	.....	.....
TRENT VALLEY CANALS.					
Canadian vessels, steam	4,337	78,428	95,240	.....	.....
" sail	688	19,519	32,632	.....	.....
Total Canadian	5,025	97,947	127,872	.....	.....
United States vessels, steam	.....	.....	.....	.....	.....
" sail	.....	.....	.....	.....	.....
Total United States	.....	.....	.....	.....	.....
Grand total, Trent Valley Canals	5,025	97,947	127,872	.....	.....
MURRAY CANAL.					
Canadian vessels, steam	748	55,213	49,784	35,581	.....
" sail	179	11,493	11,488	4,048	.....
Total Canadian	927	66,706	61,272	39,629	.....
United States vessels, steam	48	509	170	368	.....
" sail	23	90	5	121	.....
Total United States	71	599	175	489	.....
Grand total, Murray Canal	998	67,305	61,447	40,118	.....
SAULTE STE. MARIE CANAL.					
Canadian vessels, steam	2,957	859,158	911,216	75,190	221,475
" sail	332	35,248	38,373	1,385	312
Total Canadian	3,289	894,406	949,589	76,575	221,787
United States vessels, steam	1,905	24,348	11,664	24,205	103,018
" sail	99	2,642	697	600	4,467
Total United States	2,204	26,990	12,361	24,805	107,485
Grand total, Sault Ste. Marie Canal	5,293	921,396	961,950	101,380	329,272

of Vessels passed through all the Canals during the Season of Navigation ended 1908.—*Continued.*

From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
Up.	Down.	Up.	Down.	Up.	Down.	
			276	140	482	622
			493	1,033	2,267	3,300
			769	1,173	2,749	3,922
			2,381	93,198	96,742	189,940
				13,772	13,151	26,923
				34,000	34,637	68,637
				47,772	47,788	95,560
				47,772	47,788	95,560
				78,428	95,240	173,668
				19,519	32,632	52,151
				97,947	127,872	225,819
				97,947	127,872	225,819
		536	31,487	91,330	81,271	172,601
		30	4,587	15,571	16,075	31,646
		566	36,074	106,901	97,346	204,247
		65	1,322	942	1,492	2,434
			384	211	389	600
		65	1,706	1,153	1,881	3,034
		631	37,780	108,054	99,227	207,281
2,027	7,844	339,212	106,982	1,275,587	1,247,517	2,523,104
		2,453	2,357	39,086	41,042	80,128
2,027	7,844	341,665	109,339	1,314,673	1,288,559	2,603,232
2,588,883	3,913,721	188,396	9,751	2,825,832	4,038,154	6,863,986
120,625	36,991	5,347	300	129,214	42,455	171,669
2,709,508	3,950,712	193,743	10,051	2,955,046	4,080,609	7,035,655
2,711,535	3,958,556	535,408	119,390	4,269,719	5,369,168	9,638,887

TABLE 4.—COMPARATIVE STATEMENT of the Traffic of all the Canals for the Years ending December 31, 1907 and 1908.

Articles.	1907.	1908.	Increase.	Decrease.
Class No. 1.	Tons,	Tons.	Tons.	Tons.
Canadian vessels, steam	4,528,064	5,201,093	673,029	
" sail	1,796,715	1,579,696		217,019
United States vessels, steam	10,822,555	7,881,570		2,940,985
" sail	786,411	639,569		146,842
Total, class No. 1	17,933,745	15,301,928	673,029	3,304,846
Class No. 2.	No.	No.	No.	No.
Passengers	279,199	280,830	1,631	
Class No. 3.	Tons.	Tons.	Tons.	Tons.
Barley	154,986	174,628	19,642	
Buckwheat	53	858	805	
Corn	410,671	153,713		256,958
Flour	378,644	228,605		150,039
Hay, pressed	25,121	18,259		6,862
Meal, all kinds	49,612	28,100		21,512
Oil cake	2,028	134		1,894
Oats	343,984	225,659		118,325
Pease	822	286		536
Potatoes	6,535	6,858	323	
Rye	13,638	26,661	13,023	
Flax seed	248,940	234,738		14,202
Wheat	2,473,202	3,199,031	725,829	
All other vegetable	27,096	23,838		3,258
Cattle	552	628	76	
Fish	2,705	2,220		485
Hogs	578	369		209
Hides and leather	50	101	51	
Horses	784	701		83
Dressed meats	701	106		595
Pork and products	1,185	2,273	1,088	
Sheep	332	209		123
Wool	1,635	4		1,631
All other animal	12,499	10,177		2,322
Total, class No. 3	4,156,353	4,338,156	760,837	579,034
Class No 4.				
Agricultural implements	8,508	11,378	2,870	
Bricks	20,953	15,769		5,184
Cement and lime	78,347	49,577		28,770
Clay and sand	174,274	126,065		48,209
Crockery and earthenware	1,804	1,813	9	
Furniture	4,165	2,905		1,260
Glass, all kinds	10,990	10,364		626
Iron, pig and bloom	155,466	52,952		102,514
" all other	71,208	132,307	61,099	
Nails	20,397	12,075		8,322
Oils	59,903	83,742	23,839	
Paint	2,473	3,714	1,241	
Salt	19,035	22,709	3,674	
Steel	22,740	82,902	60,162	
Whisky and all other spirits	10,682	10,193		489
Merchandise not enumerated	526,474	531,665	5,191	
Total, class No. 4	1,187,419	1,150,130	158,085	195,374

TABLE 4.—COMPARATIVE STATEMENT of the Traffic of all the Canals for the Years ending December 31, 1907 and 1908—*Concluded.*

Articles.	1907.	1908.	Increase.	Decrease.
Class No. 5.	Tons.	Tons.	Tons.	Tons.
Floats	39,550	15,684		23,866
Firewood, in vessels	59,999	74,117	14,118	
Pulpwood	752,691	393,189		359,502
Sawed lumber, in vessels	533,051	414,405		118,646
" rafts	243	2,824	2,581	
Railway ties, in vessels	3,371	2,598		773
Masts, spars, &c., in rafts	4,630	841		3,789
Square timber, in vessels	26,214	17,570		8,644
" rafts	10,910	35,502	24,592	
Shingles	19,087	9,990		9,097
Saw logs	35,628	18,056		17,572
Other woods	2,552	2,655	103	
Total, class No. 5	1,487,926	987,431	41,3	541,889
Class No. 6.				
Coal, hard " soft	3,546,683	1,006,259 2,521,850		18,574
Coke		52	52	
Copper ore	19,384	8,855		10,529
Iron ore	10,105,016	7,402,672		2,702,344
Other ore	4,889	10,321	5,432	
Stone, all kinds	35,969	77,094	41,125	
Total, class No. 6	13,711,941	11,027,103	46,609	2,731,447
Freight, grand total	20,543,639	17,502,820	1,006,925	4,047,744
Freight, grand total, decrease				3,040,819

APPENDIX A—*Continued.*

TABLE 5—STATEMENT of Traffic on the undermentioned Canals during the Season of Navigation in 1908.

ARTICLES.	Welland Canal.	St. Lawrence Canals.	Chambly Canal.	Murray Canal.	Ottawa Canals.	Rideau Canal.	St. Peter's Canal.	Trent Valley Canal.	Sault Ste. Marie Canal.
Class No. 1.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Canadian vessels, steam	857,362	1,144,197	49,121	172,601	110,571	143,546	26,923	173,668	2,523,104
United States vessels, steam	635,977	376,501	2,014	2,434	36	622			6,863,986
Canadian vessels, sail	134,875	1,040,083	25,092	31,646	104,612	42,472	68,637	52,151	80,128
United States vessels, sail	34,957	139,766	278,716	600	10,561	3,300			171,669
Total, class No. 1	1,663,171	2,700,547	354,943	207,281	225,780	189,940	95,560	225,819	9,638,887
Class No. 2.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Passengers	6,153	94,594	3,597	23,771	14,557	22,640		85,291	30,227
Class No. 3.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Barley	31,172	27,483	17	200		176	10	3	115,567
Buckwheat		850				8			
Corn	127,402	26,134	43		2	95	37		
Flaxseed	32,088	30,607							172,043
Flour	23,209	10,151	476		16	186	1,383	17	193,167
Hay, pressed		5,504	7,812		2,327	1,332	1,261	23	
Meals, all kinds	21,628	371	24		2	45	484	17	5,529
Oil cake		75			5	54			
Oats	33,423	30,890	420		495	474	3,566	21	156,370
Pease	40	145	9	24		4		64	
Potatoes		183	128		828	79	5,468	172	
Rye	6,667	6,783						11	13,200
Wheat	732,131	708,022	9			1,232		416	1,757,221
All other agricultural products, vegetables	175	13,310	1,000	1,228	572	468	1,026	14	6,045
Cattle		263	73		229	2	9	52	
Fish	29	40	5	2	1	18	2,072		53
Hogs		3	61		26		2	277	
Hides and leather	39	2	30	7	1	12	3	3	4
Horses		493	10	8	150	28	1	9	2

Dressed meats	.....	35	2	.....	5	36	26	2	.....
Pork and products	868	1,049	6	1	3	164	182	.....	.....
Sheep	.....	26	57	.....	118	.....	6	2	.....
Wool	.....	.....	2	.....	2	.....	.....	.....	.....
All other agricultural products, animal	89	5,518	48	297	2,464	1,697	10	54	.....
Total, class No. 3	1,008,960	867,937	10,232	1,767	7,246	6,110	15,546	1,157	2,419,201
Class No. 4.									
Agricultural implements	7,008	140	126	15	14	371	3	19	3,682
Bricks	1,748	10,775	729	.....	.....	1,309	56	472	680
Cement and lime	4,335	1,725	34	1,416	210	739	1,096	556	39,159
Clay and sand	325	49,952	9,630	800	43,545	21,421	17	.....	375
Crockery and earthenware	441	887	28	240	6	126	27	18	40
Furniture	1	2,381	92	170	58	147	21	35	.....
Glass, all kinds	3,444	5,696	11	539	142	328	85	.....	119
Iron, pig and bloom	9,683	2,173	20	102	1	87	4	8	40,874
" all other	26,043	22,998	869	432	67	1,399	166	22	80,311
Nails	4,856	5,313	83	150	.....	568	69	.....	1,036
Oil, in barrels	47,290	35,010	183	279	1	535	433	11	.....
Paint	1,082	2,102	62	265	.....	134	49	.....	20
Salt	429	4,679	192	30	.....	2,560	420	6	14,393
Steel	17,095	40,768	45	358	.....	118	.....	.....	21,518
Whisky and all other spirits	3,866	5,038	30	512	.....	603	37	11	96
Merchandise, not enumerated	137,515	93,536	8,466	3,206	2,659	6,312	1,677	1,411	276,883
Total, class No. 4	265,161	283,173	20,907	8,514	46,703	36,757	4,160	2,569	482,186
Class No. 5.									
Floats	.....	.....	.....	.....	10,080	.....	.....	4,936	668
Firewood, in vessels	5,369	372	402	.....	19,667	6,603	149	41,225	330
Pulpwood	4,293	86,511	302,384	1	.....	.....	.....	.....	.....
Lumber, sawn, in vessels	43,690	58,576	60,517	133	163,877	24,922	4,653	2,583	55,454
" in rafts	.....	84	.....	.....	.....	.....	.....	2,096	644
Railway ties, in vessels	478	200	.....	17	38	272	240	.....	1,353
Masts, spars and telegraph poles, in rafts	.....	.....	738	48	.....	40	15	.....	.....
Square timber, in vessels	12,820	2,232	.....	.....	150	4	202	1,965	197
" in rafts	.....	28,882	.....	.....	3,750	1,000	.....	1,870	.....
Shingles	3,572	1,719	70	24	8	235	423	149	3,790
Saw logs	318	.....	.....	.....	6,901	138	130	10,286	283
Other woods	107	1,446	285	380	19	11	140	267	.....
Total, class No. 5	70,647	180,022	364,396	603	204,490	33,225	5,952	65,377	62,719

TABLE 5—STATEMENT of Traffic on the undermentioned Canals during the Season of Navigation in 1908—*Concluded.*

ARTICLES.	Welland Canal.	St. Lawrence Canal.	Chambly Canal.	Murray Canal.	Ottawa Canal.	Rideau Canal.	St. Peter's Canal.	Trent Valley Canal.	Sault Ste. Marie Canal.
Class No. 6.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal, hard	172,523	389,163	95,336	397	23	9,358	626	84	338,749
" soft	144,398	266,775	175	14,430	24	3,757	40,865	66	2,051,360
Coke						12			40
Copper ore									8,855
Iron "	8,974	1,006	7,533	15	21		20		7,385,103
Other "	9,030		70		20	419	244	5	533
Stone, all kinds	23,760	21,026	4,627	175		2	4,602	12,432	10,470
Total, class No. 6	358,685	677,970	107,741	15,017	88	13,548	46,357	12,587	9,795,110
Grand total	1,703,453	2,009,102	503,276	25,901	258,527	89,640	72,015	81,690	12,759,216

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, April 15, 1908.

RICHARD DEVLIN,
Compiler of Canal Statistics.

TABLE 6.—SUMMARY STATEMENT of Traffic on the undermentioned Canals during the Season of Navigation ended 31st December, 1908, showing the total quantity of each description of property passed through.

ARTICLES.	Welland Canal.	St. Lawrence Canals.	Chambly Canal.	Murray Canal.	Ottawa Canals.	Rideau Canal.	St. Peter's Canal.	Trent Valley Canals.	Sault Ste. Marie Canal.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Vessels of all kinds	1,663,171	2,700,547	354,993	207,281	225,780	189,940	95,560	225,819	9,638,887
	No.	No.	No.	No.	No.	No.	No.	No.	No.
Passengers	6,153	94,594	3,597	23,771	14,557	22,640	.....	85,291	30,227
Forest—Produce of Wood.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Floats	.....	.....	.....	.....	10,080	.....	.....	4,936	668
Firewood	5,369	372	402	.....	19,667	6,603	149	41,225	330
Pulpwood	4,293	86,511	302,384	1	.....	.....	.....	4,679	.....
Lumber, sawed	43,690	58,660	60,517	133	163,877	24,922	4,653	.....	56,098
Masts, spars, &c.	.....	.....	738	48	.....	40	15	.....	.....
Railway ties	478	200	.....	17	38	272	240	.....	1,353
Saw logs	318	.....	.....	.....	6,901	138	130	10,286	283
Shingles	3,572	.....	70	24	8	235	423	149	3,790
Timber, square	12,820	31,114	.....	.....	3,900	1,004	202	3,835	197
Other woods	407	1,446	285	380	19	11	140	267	.....
Total	70,647	180,022	364,396	603	204,490	33,225	5,952	65,377	62,719
Farm Stock.									
Cattle	.....	263	73	.....	229	2	9	52	.....
Hogs	.....	3	61	.....	26	.....	2	277	.....
Horses	.....	493	10	8	150	28	1	9	2
Sheep	.....	26	57	.....	118	.....	6	2	.....
Total	.....	785	201	8	523	30	18	340	2

TABLE 6.—SUMMARY STATEMENT of Traffic on the undermentioned Canals, &c.—*Continued*

ARTICLES.	Welland Canal.	St. Lawrence Canals.	Chambly Canal.	Murray Canal.	Ottawa Canals.	Rideau Canal.	St. Peter's Canal.	Trent Valley Canals.	Sault Ste. Marie Canal.
Produce of Animals.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Hides and leather	39	2	30	7	1	12	3	3	4
Dressed meats		35	2		5	36	26	2	
Pork and pork products	868	1,049	6	1	3	164	182		
Wool			2		2				
Agricultural products not enumerated, animal	89	5,518	48	297	2,464	1,697	10	54	
Total	996	6,604	88	305	2,475	1,909	221	59	4
Agricultural Products.									
Agricultural products not enumerated, vegetable	175	13,310	1,000	1,228	572	468	1,026	14	6,045
Barley	31,172	27,483	17	200		176	10	3	115,567
Buckwheat		850				8			
Corn	127,402	26,134	43		2	95	37		
Flour	23,209	10,151	476		16	186	1,383	17	193,167
Hay, pressed		5,504	7,812		2,327	1,332	1,261	23	
Meals, all kinds	21,628	371	24		2	45	484	17	5,529
Oats	33,423	30,890	420		495	474	3,566	21	156,370
Pease	40	145	9	24		4		64	
Potatoes		183	128		828	79	5,468	172	
Rye	6,667	6,783						11	13,200
Flax seed	32,088	30,607							172,043
Wheat	732,131	708,022	9			1,232		416	1,757,221
Total	1,007,935	860,433	9,938	1,452	4,242	4,099	13,235	758	2,419,142
Manufactures.									
Agricultural implements	7,008	140	126	15	14	371	3	19	3,682
Bricks	1,748	10,775	729			1,309	56	472	680
Cement and water lime	4,335	1,725	341	1,416	210	739	1,096	556	39,159
Crockery and earthenware	441	887	28	240	6	126	27	18	40
Furniture	1	2,381	92	170	58	147	21	35	

Glass of all kinds	3,444	5,696	11	539	142	328	85	...	119
Iron, pig and bloom	9,683	2,173	20	102	1	87	4	8	40,874
" all other	26,043	22,998	869	432	67	1,399	166	22	80,311
Nails	4,856	5,313	83	150	.....	568	69	.....	1,036
Oil	47,290	35,010	183	279	1	535	433	11	.....
Oil cake	.....	75	.....	.....	5	54	49	.....	.....
Paint	1,082	2,102	62	265	.....	134	.....	.....	20
Whisky and all other spirits	3,866	5,038	30	512	.....	603	37	11	96
Steel	17,095	40,768	45	358	.....	118	.....	.....	24,518
Total	126,892	135,081	2,619	4,478	504	6,518	2,046	1,152	190,535
Merchandise.									
Clay, lime and sand	325	49,952	9,630	800	43,545	21,421	17	...	375
Coal, hard	172,523	389,163	95,336	397	23	9,358	626	84	338,749
" soft	144,398	266,775	175	14,430	24	3,757	40,865	66	2,051,360
Coke	.....	.....	.....	.....	.....	12	.....	.....	40
Fish	29	40	5	2	1	18	2,072	.....	53
Ores, all kinds	18,004	1,006	7,603	15	41	419	264	5	7,394,491
Salt	429	4,679	192	30	.....	2,560	420	6	14,393
Stone, all kinds	23,760	21,026	4,627	175	.....	2	4,602	12,432	10,470
All other goods and merchandise not enumerated	137,515	93,536	8,466	3,206	2,659	6,312	1,677	1,411	276,883
Total	496,983	826,177	126,034	19,055	46,293	43,859	50,543	14,004	10,086,814
Grand totals (passengers and tonnage of vessels not included)	1,703,453	2,009,102	503,276	25,901	258,527	89,640	72,015	81,690	12,759,216

APPENDIX A.—*Continued.*

TABLE 7 (No. 1).—GENERAL STATEMENT showing the Quantity of each Article transported on the Welland Canal during the Season of Navigation in 1908.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		U. States.	Canadian.
Agricultural products not enumerated, vegetable	74	101							74	101	175		175
Agricultural products not enumerated, animal								89		89	89	89	
Agricultural implements	7,000		6			2			7,002	2	7,008	2	7,006
Barley		20,478				7,148		3,546		31,172	31,172	7,578	23,594
Bricks								1,748		1,748	1,748	1,748	
Buckwheat													
Cement and water lime	4,335								4,335		4,335		4,335
Clay, lime and sand		325								325	325		325
Coal, hard	2,970		1,431		158,351		5,988	3,783	168,740	3,783	172,523	168,122	4,401
" soft								144,398		144,398	144,398	144,398	
Corn						99,830		27,572		127,402	127,402	127,402	
Coke													
Cattle													
Crockery and earthenware	358		70		13				441		441	13	428
Fish		29								29	29		29
Flour	22	1,976				17,694		3,517	22	23,187	23,209	21,211	1,998
Furniture	1								1		1		1
Glass, all kinds	2,298		1,146						3,444		3,444		3,444
Hay, pressed													
Hogs													
Horses													
Hides and leather	15					21		3	15	24	39	24	15
Iron, pig and bloom	9,278		300					105	9,578	105	9,683	105	9,578
" all other	24,556	28	390					1,069	24,946	1,097	26,043	1,097	24,946
Iron ore	4,196						2,389	2,389	6,585	2,389	8,974	4,778	4,196
Other ores	7,630				1,400				9,030		9,030	1,400	7,630
Meal, all kinds		241				21,353		34		21,628	21,628	21,353	275
Dressed meats													
Nails	3,976	842	38						4,014	842	4,856	3	4,853

Oats		30,289				2,070		1,084		33,423	33,423	2,070	31,735
Oil, in barrels	265	30,431	20		72	15		16,487	357	46,933	47,290	16,588	30,230
Oil cake													
Pease						40				40	40	40	
Potatoes													
Pork and products						190		678		868	868	868	
Paint	766	53	262			1			1,028	54	1,082	1	1,081
Rye		14				2		6,651		6,667	6,667	6,653	14
Flaxseed		21,817						10,271		32,088	32,088	8,791	23,297
Salt		149						280		429	429	83	346
Stone, all kinds	500	7,476			15,328			456	15,828	7,932	23,760	15,784	7,976
Sheep													
Steel	5,848		250			9,086		1,911	6,098	10,997	17,095	10,997	6,098
Sugar													
Whisky and all other spirits	1,555	637	606		189			879	2,350	1,516	3,866	651	3,215
Wheat		451,753	1,380	1,892		24,651		252,455	1,380	730,751	732,131	252,791	479,340
Wool													
All other goods and merchandise not enumerated	50,366	754	18,258		63,781	1,857		2,499	132,405	5,110	137,515	73,156	64,359
Floats													
Firewood, in vessels		210	1,650			3,509			1,650	3,719	5,369	3,509	1,860
Pulpwood			4,293						4,293		4,293		4,293
Lumber, sawn, in vessels	757		2,644	13,386		21,571		5,332	3,401	40,289	43,690	26,903	16,787
" " rafts													
Masts, spars and telegraph poles, in rafts													
Railway ties, in vessels						478				478	478	478	
Sawlogs	260	58							260	58	318		318
Shingles	996		2,576						3,572		3,572		3,572
Timber, square, in vessels		4,300						8,520		12,820	12,820	8,520	4,300
" " rafts													
Other woods	55		50		2				107		107	2	105
Total freight	128,077	571,961	35,370	15,278	239,136	209,518	8,377	495,736	410,960	1,292,493	1,703,453	927,208	776,245

TABLE 7 (No. 2)—GENERAL STATEMENT showing the Quantity of each Through Article transported on the Welland Canal, &c.—*Con.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		United States.	Canadian.
Agricultural products not enumerated, vegetable	74	101							74	101	175		175
Agricultural products not enumerated, animal								89		89	89	89	
Agricultural implements	7,000		6			2			7,006	2	7,008	2	7,006
Barley		20,478				7,148		3,546		31,172	31,172	7,578	23,594
Bricks								1,748		1,748	1,748	1,748	
Cement and water lime	4,335								4,335		4,335		4,335
Clay, lime and sand		325								325	325		325
Coal, hard	2,970		1,431		158,351		5,988	3,783	168,740	3,783	172,523	168,122	4,401
" soft								144,398		144,398	144,398	144,398	
Corn						99,830		27,572		127,402	127,402	127,402	
Crockery and earthenware	358		70		13				441		441	13	428
Fish		29								29	29		29
Flour	22	1,976				17,694		3,517	22	23,187	23,209	21,211	1,998
Furniture	1								1		1		1
Glass, all kinds	2,298		1,146						3,444		3,444		3,444
Hides and leather	15					21		3	15	24	39	24	15
Iron, pig and bloom	9,278		300					105	9,578	105	9,683	105	9,578
" all other	24,556	28	390					1,069	24,946	1,097	26,043	1,097	24,946
Iron ore	4,196						2,389	2,389	6,585	2,389	8,974	4,778	4,196
Other ore	7,630				1,400				9,030		9,030	1,400	7,630
Meal, all kinds		241				21,353		34		21,628	21,628	21,353	275
Nails	3,976	842	38						4,014	842	4,856	3	4,853
Oats		30,289				2,070		1,064		33,423	33,423	2,070	31,353
Oil (in barrels)	265	30,431	20		72	15		15,487	357	46,933	47,290	16,588	30,702
Pease						40				40	40	40	
Pork and products						190		678		868	868	868	
Paint	766	53	262			1			1,028	54	1,082	1	1,081
Rye		14				2		6,651		6,667	6,667	6,653	14
Flaxseed		21,817						10,271		32,088	32,088	8,791	23,297
Salt		149						280		429	429	83	346

Stone, all kinds		600			15,328			456	15,328	1,056	16,384	15,784	600
Steel	5,848		250			9,086		1,911	6,098	10,997	17,095	10,997	6,098
Whisky and all other spirits	1,555	637	606		189			879	2,350	1,516	3,866	651	3,215
Wheat		451,423	1,380	1,892		24,651		252,455	1,380	730,121	731,801	252,791	479,010
All other goods and merchandise not enumerated	50,366	754	18,258		63,781	1,857		2,499	132,405	5,110	137,515	73,156	64,359
Firewood, in rafts		210	1,650			3,509			1,650	3,719	5,369	3,509	1,860
Pulpwood			4,293						4,293		4,293		4,293
Lumber, sawn, in vessels	757		2,644	13,386		21,571		5,332	3,401	40,289	43,690	26,903	16,787
Railway ties in vessels						478				478	478	478	
Shingles	996		2,576						3,572		3,572		3,572
Timber, square, in vessels		4,300						8,520		12,820	12,820	8,520	4,300
Other woods	55		50		2				107		107	2	105
Total through freight	127,317	564,697	35,370	15,278	239,136	209,518	8,377	495,736	410,200	1,285,229	1,695,429	926,208	768,221

TABLE 7 (No. 3).—GENERAL STATEMENT showing the Quantity of each Way Article transported on the Welland Canal during the Season of Navigation in 1908.

Way Articles.	From Canadian to Canadian Ports.		Tons.		Total Tons.
	Up.	Down.	Up.	Down.	
Sotne, all kinds	500	6,876	500	6,876	7,376
Wheat		330		330	330
Saw logs	260	58	260	58	318
Total way freight	760	7,264	760	7,264	8,024

APPENDIX A—*Continued.*

TABLE 7 (No. 4).—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Lawrence Canals during the Season of Navigation in 1908.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		U. States	Canadian.
Agricultural products not enumerated, vegetable	9,377	3,933							9,377	3,933	13,310		13,310
Agricultural products not enumerated, animal	979	4,349		190					979	4,539	5,518		5,518
Agricultural implements	131	9							131	9	140		140
Barley	306	2,859							306	2,859	3,165		3,165
Bricks	8,981	20						231	8,981	251	9,232	231	9,001
Buckwheat	850								850		850		850
Cement and water lime	1,629	16	38					42	1,667	58	1,725		1,725
Clay, lime and sand	39,714	6,646					3,592		43,306	6,646	49,952	5,244	44,708
Coal, hard	1,371	5,699	2,403				1,617	335,998	5,391	341,697	347,088	344,814	2,274
" soft	183,272	18,699						64,804	183,272	83,503	266,775	81,858	184,917
Corn	1,256	13,164					420	840	1,676	14,004	15,680	2,156	13,524
Cattle	9	254							9	254	263		263
Crockery and earthenware	708	82	97						805	82	887		887
Fish	10	30							10	30	40		40
Flour	1,385	3,738							1,385	3,738	5,123		5,123
Furniture	543	1,830		8					543	1,838	2,381		2,381
Glass, all kinds	3,190	490	2,016						5,206	490	5,696		5,696
Hay, pressed	5,002	502							5,002	502	5,501		5,504
Hogs		3								3	3		3
Horses	167	306			14			6	181	312	493	1	492
Hides and leather					2				2		2		2
Iron, pig and bloom	2,052	121							2,052	121	2,173		2,173
" all other	18,711	1,589	1,307				838		20,856	1,589	22,445	838	21,607
Iron ore	1,002	4							1,002	4	1,006		1,006
Meal, all kinds	60	155							60	155	215	34	181
Meats, dressed	35								35		35		35
Nails	4,826	167	317						5,143	167	5,310		5,310
Oats	80	2,729							80	2,729	2,809		2,809
Oil, in barrels	1,121	198	2,488		1		1,200		4,810	198	5,008	3,339	1,669
Oil cake	75								75		75		75

Pease	85	60						85	60	145			145
Potatoes	150	33						150	33	183			183
Pork and pork products	318	53					154	318	207	525	154		371
Paint	1,407	165	523				7	1,930	172	2,102			2,102
Rye	120	1						120	1	121			121
Flax seed	1	871					2,235	1	3,106	3,107	2,235		872
Salt	3,764	439	57					3,821	439	4,260			4,260
Stone, all kinds	375	19,374				5		375	19,379	19,754	165		19,589
Sheep	3	23						3	23	26			26
Steel	37,235	3,373	160					37,395	3,373	40,768			40,768
Whiskey and all other spirits	2,446	536	1,000					3,446	536	3,982			3,982
Wheat	3,300	18,096						3,300	18,096	21,396			21,396
All other goods and merchandise not enumerated	57,746	11,071	18,553		736	1,217	968	1,119	78,003	13,407	91,410	5,561	85,849
Firewood, in vessels	372								372		372		372
Pulpwood			86,511						86,511		86,511		86,511
Lumber, sawn, in vessels	36,104	626	21,846						57,950	626	58,576		58,576
" " rafts		84								84	84		84
Railway ties, in vessels	1	50	149						150	50	200		200
Shingles	150		1,569						1,719		1,719		1,719
Timber, square, in vessels	844	1,330	53			5			897	1,335	2,232		2,232
" " rafts		28,882								28,882	28,882		28,882
Other woods	171	200	1,075						1,246	200	1,446		1,446
Total freight	431,434	152,859	140,162	198	753	1,227	8,635	405,136	580,984	559,720	1,140,704	446,630	694,074
Articles having passed the Welland Canal—													
Barley		22,388						1,930		24,318	24,318	1,356	22,962
Corn		10,014						440		10,454	10,454		
Oats		28,051						30		28,081	28,081		28,081
Rye		2,251						4,411		6,662	6,662	1,448	5,214
Wheat		574,906						111,720		686,626	686,626	216,405	470,221
Flax seed		20,904						6,596		27,500	27,500	8,076	19,424
Flour		1,511						3,517		5,028	5,028	3,517	1,511
Meals, all kinds		156								156	156		156
Bricks								1,543		1,543	1,543	1,543	
Iron, all kinds		28						525		553	553	525	28
Nails		3								3	3		3
Oils		20,303						9,699		30,002	30,002	9,699	20,303
Pork and pork products								524		524	524	524	
Salt		69						350		419	419	128	301
Whiskey and all other spirits		690						366		1,056	1,056	387	669
Merchandise		481						1,645		2,126	2,126	1,684	442
Coal	3,472	5,299						33,304	3,472	38,603	42,075	38,603	3,472
Stone, all kinds								1,272		1,272	1,272	1,272	
Grand total, freight	434,906	839,913	140,162	198	753	1,227	8,635	583,308	584,456	1,424,646	2,009,102	742,251	1,266,851

No. (A) 5.—General Statement showing the quantity of each Through Article transported on the St. Lawrence Canals during the Season of Navigation in 1908.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		United States.	Canadian.
Agricultural products not enumerated, vegetable	512	3,365							512	3,365	3,877		3,877
Agricultural products not enumerated, animal	24	3,145							24	3,145	3,169		3,169
Agricultural implements		3								3	3		3
Barley		1,964								1,964	1,964		1,964
Bricks	1,854						231		1,854	231	2,085		2,085
Cement and water lime	137		38				42		175	42	217		217
Clay, lime and sand	620	10							620	10	630		630
Coal, hard	550	4,053	911				324,475		1,461	328,528	329,989	328,536	1,453
" soft	19,006	16,587					64,422		19,006	81,009	100,015	81,009	19,006
Corn		1,036								1,036	1,036	896	140
Crockery and earthenware	641	57	97						738	57	795		795
Fish	10	29							10	29	39		39
Flour	11	239							11	239	250		250
Furniture	392	1,286		8					392	1,294	1,686		1,686
Glass, all kinds	2,731	385	2,016						4,747	385	5,132		5,132
Hay, pressed	4								4		4		4
Horses		50								50	50		50
Iron, pig and bloom	1,092	64							1,902	64	1,966		1,966
" all other	11,410	395	1,307						12,717	395	13,112		13,112
Iron ore	1,000								1,000		1,000		1,000
Meal, all kinds		90								90	90	34	56
Nails	3,882	97	317						4,199	97	4,296		4,296
Oats		1,916								1,916	1,916		1,916
Oil, in barrels	651	125	2,488						3,139	125	3,264	2,138	1,126
Pease		45								45	45		45
Potatoes	5								5		5		5
Pork and pork products	54	16					154		54	170	224	154	70
Paint	1,159	110	523				7		1,682	117	1,799		1,799
Flaxseed		871					2,235			3,106	3,106	2,235	871

Salt	246	32	57						303	32	335		335
Steel	27,088	322	160						27,248	322	27,570		27,570
Spirits, beer, &c.	1,724	478	1,000						2,724	478	3,202		3,202
Wheat	176	13,824							176	13,824	14,000		14,000
All other goods and merchandise not enumerated	39,832	6,165	18,549					1,119	58,381	7,284	65,665	328	65,337
Pulpwood	84,411								84,411		84,411		84,411
Lumber, sawn, in vessels	3,407	4	20,087						23,494	4	23,498		23,498
Railway ties, in vessels			149						149		149		149
Shingles			1,569						1,569		1,569		1,569
Timber, square, in vessels		1,300	53						53	1,300	1,353		1,353
Other woods	10		1,075						1,085		1,085		1,085
Total through freight	203,449	58,063	50,396	8				392,685	253,845	450,756	704,601	415,330	289,271
Barley		22,388						1,930		24,318	24,318	1,356	22,962
Corn		10,014						440		10,454	10,454	10,454	
Oats		28,051						30		28,081	28,081		28,081
Rye		2,251						4,411		6,662	6,662	6,662	
Wheat		574,906						111,720		686,626	686,626	216,405	470,221
Flax seed		20,904						6,596		27,500	27,500	8,076	19,424
Flour		1,511						3,517		5,028	5,028	3,517	1,511
Meal, all kinds		156								156	156		156
Bricks								1,543		1,543	1,543	1,543	
Iron, all other		28						525		553	553	525	28
Nails		3								3	3		3
Oils		20,303						9,699		30,002	30,002	9,699	20,303
Pork and pork products								524		524	524	524	
Salt		69						350		419	419		419
Whiskey and all other spirits		690						366		1,056	1,056	387	669
Merchandise		481						1,645		2,126	2,126	1,684	442
Coal	3,472	5,299						33,304	3,472	38,603	42,075	38,603	3,472
Stone, all kinds								1,272		1,272	1,272	1,272	
Grand total, freight	206,921	745,117	50,396	8				570,557	257,317	1,315,682	1,572,799	716,037	856,962

TABLE 7 (No. 6).—GENERAL STATEMENT showing the Quantity of each Way Article transported on the St. Lawrence Canals during the Season of Navigation in 1908.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		United States.	Canadian.
Agricultural products not enumerated, vegetable	8,865	568							8,865	568	9,433		9,433
Agricultural products not enumerated, animal	955	1,204		190					955	1,394	2,349		2,349
Agricultural implements	131	6							131	6	137		137
Barley	306	895							306	895	1,201		1,201
Bricks	7,127	20							7,127	20	7,147		7,147
Buckwheat	850								850		850		850
Cement and water lime	1,492	16							1,492	16	1,508		1,508
Clay, lime and sand	39,094	6,636					3,592		42,686	6,636	49,322	5,244	44,078
Coal, hard	821	1,646	1,492				1,617	11,523	3,930	13,169	17,099	16,278	821
" soft	164,266	2,112						382	164,266	2,494	166,760	849	165,911
Corn	1,256	12,128					420	840	1,676	12,968	14,644	1,260	13,284
Cattle	9	254							9	254	263		263
Crockery and earthenware	67	25							67	25	92		92
Fish		1								1	1		1
Flour	1,374	3,499							1,374	3,499	4,873		4,873
Furniture	151	544							151	544	695		695
Glass, all kinds	459	105							459	105	564		564
Hay, pressed	4,998	502							4,998	502	5,500		5,500
Hogs		3								3	3		3
Horses	167	256			14	6			181	262	443	1	442
Hides and leather					2				2		2		
Iron, pig and bloom	150	57							150	57	207		207
" all other	7,301	1,194					838		8,139	1,194	9,333	838	8,495
Iron ore	2	4							2	4	6		6
Other ore													
Meal, all kinds	60	65							60	65	125		125
Meats, dressed	35								35		35		35
Nails	944	70							944	70	1,014		1,014
Oats	80	813							80	813	893		893

Oil, in barrels	470	73			1		1,200		1,671	73	1,744	1,201	543
Oil cake	75								75		75		75
Pease	85	15							85	15	100		100
Potatoes	145	33							145	33	178		178
Pork and pork products	264	37							264	37	301		301
Paint	248	55							248	55	303		303
Rye	120	1							120	1	121		121
Flaxseed	1								1		1		1
Salt	3,518	407							3,518	407	3,925		3,925
Stone, all kinds	375	19,374				5			375	19,379	19,754	165	19,589
Sheep	3	23							3	23	26		26
Steel	10,147	3,051							10,147	3,051	13,198		13,198
Spirits, beer, &c	722	58							722	58	780		780
Wheat	3,124	4,272							3,124	4,272	7,396		7,396
Wool													
All other goods and merchandise not enumerated	17,914	4,906	4		736	1,217	968		19,622	6,123	25,745	5,233	20,515
Floats													
Fire wood, in vessels	372								372		372		372
Pulpwood			2,100						2,100		2,100		2,100
Lumber, sawn, in vessels	32,697	622	1,753						34,456	622	35,078		35,078
" " in rafts		84								84	84		84
Masts, spars and telegraph poles, in rafts													
Railway ties, in vessels	1	50							1	50	51		51
Sawlogs													
Shingles	150								150		150		150
Timber, square, in vessels	844	30				5			844	35	879		879
" " in rafts		28,882								28,882	28,882		28,882
Other woods	161	200							161	200	361		361
Total way freight	312,396	94,796	5,355	190	753	1,233	8,635	12,745	327,139	108,964	436,103	31,069	405,034

TABLE 7.—(No. 7.)—GENERAL STATEMENT showing the Quantity of each Article transported on the Ottawa Canals, during the Season of Navigation in 1908.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		United States.	Canadian.
Agricultural products not enumerated, vegetable		572								572	572		
" " " animals		2,464								2,464	2,464		
Agricultural implements		14								14	14		
Barley													
Bricks													
Buckwheat													
Cement and water-lime		210								210	210		
Clay, lime and sand		43,545								43,545	43,545		
Coal, hard		23								23	23		
" soft		24								24	24		
Corn		2								2	2		
Coke													
Cattle		229								229	229		
Crockery and earthenware		6								6	6		
Fish		1								1	1		
Flour		16								16	16		
Furniture		58								58	58		
Glass, all kinds		142								142	142		
Hay, pressed		2,327								2,327	2,327		
Hogs		26								26	26		
Horses		150								150	150		
Hides and leather		1								1	1		
Iron, pig and bloom		1								1	1		
" all other		67								67	67		
" ore		21								21	21		
Other ores		20								20	20		
Meal, all kinds		2								2	2		
Meats, dressed		5								5	5		
Nails													
Oats		495								498	498		

Oil, in barrels		1								1	1		
Oil cake		5								5	5		
Pease													
Potatoes		828								825	825		
Pork		3								3	3		
Paint													
Rye													
Flaxseed													
Salt													
Stone, all kinds													
Sheep		118								118	118		
Steel													
Whisky and all other spirits													
Wheat													
Wool		2								2	2		
All other goods and merchandise not enumerated	4	2,655							4	2,655	2,659		
Floats	2,100	7,980							2,100	7,980	10,080		
Firewood, in vessels		19,667								19,667	19,667		
Pulpwood													
Lumber, sawn, in vessels	184	134,147		28,855				691	184	163,693	163,877		
" " rafts													
Masts, spars and telegraph poles, in rafts													
Railway ties, in vessels		38								38	38		
Sawlogs	20	6,881							20	6,881	6,901		
Shingles		8								8	8		
Timber, square, in vessels	50	100							50	100	150		
" " rafts		3,750								3,750	3,750		
Other woods		19								19	19		
Total freight	2,358	226,623		28,855				691	2,358	256,169	258,527		

TABLE 7 (No. 4.)—GENERAL STATEMENT showing the Quantity of each Article transported on the Chambly Canal during the Season of Navigation in 1908.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		United States.	Canada.
Agricultural products not enumerated, Vegetables	71	927							71	929	1,000		1,000
Agricultural products not enumerated, Animal	1	47							1	47	48		48
Agricultural Implements	126								126		126		126
Barley	17								17		17		17
Bricks	47							682	47	682	729	682	47
Buckwheat													
Cement and water lime	171							170	171	170	341	170	171
Clay, lime and sand	532							9,098	532	9,098	9,630	9,098	532
Coal, hard	2							95,334	2	95,334	95,336	95,324	12
" soft	1	2						172	1	174	175	172	3
Corn	43								43		43		43
Coke													
Cattle		73								73	73		73
Crockery and earthenware	28								28		28		28
Fish	5								5		5		5
Flour	473	3							473	3	476		476
Furniture	66	26							66	26	92		92
Glass, all kinds	11								11		11		11
Hay, pressed		6,513	1,299						1,299	6,513	7,812		7,812
Hogs	2	59							2	59	61		61
Horses	3	7							3	7	10		10
Hides and leather	22	8							22	8	30		30
Iron, pig and bloom	20								20		20		20
" all other	28	1						840	28	841	869	840	29
Iron ore	60							7,473	60	7,473	7,533	7,473	60
Ores, all other	70								70		70		70
Meal, all kinds	23	1							23	1	24		24
Dressed meats	2								2		2		2

Nails	83								83		83		83
Oats		426								420	420		420
Oil, in barrels	183								183		183		183
Oil cake													
Pease	3	6							3	6	9		9
Potatoes	87	41							87	41	128		128
Pork	6								6		6		6
Paint	62								62		62		62
Rye													
Flax seed													
Salt	192								192		192		192
Stone, all kinds	136	40						4,451	136	4,491	4,627	4,451	176
Sheep		57								57	57		57
Steel	45								45		45		45
Whisky, and all other spirits	30								30		30		30
Wheat	9								9		9		9
Wool	2								2		2		2
All other goods and merchandise not enumerated	1,062	1,422	590					5,392	1,652	6,814	8,466	5,392	3,074
Floats													
Fire wood, in vessels	330	72							330	72	402		402
Pulpwood			302,384						302,384		302,384		302,384
Lumber, sawn, in vessels	61		60,456						60,517		60,517		60,517
" rafts													
Masts, spars and telegraph poles, in rafts		738								738	738		738
Railway ties in vessels													
Saw logs													
Shingles	25		45						70		70		70
Timber, square, in vessels													
" rafts													
Other woods	20	265							20	265	285		285
Total freight	4,160	10,730	364,774					123,612	368,934	134,342	503,276	123,602	379,674

TABLE 7.—(No. 9.) GENERAL STATEMENT showing the Quantity of each Article transported on the Rideau Canal during the Season of Navigation in 1908.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Charge.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		United States.	Canadian.
Agricultural products not enumerated, vegetable	131	337							131	337	468		468
Agricultural products not enumerated, animal	235	1,462							235	1,462	1,697		1,697
Agricultural implements	173	198							173	198	371		371
Barley		176								176	176		176
Bricks	1,148	161							1,148	161	1,309		1,309
Buckwheat	8								8		8		8
Cement and water-lime	424	315							424	315	739		739
Clay, lime and sand	12,380	9,041							12,380	9,041	21,421		21,421
Coal, hard	253	64					9,041		253	9,105	9,358	9,081	277
" soft	707	17					3,033		707	3,050	3,757	3,037	720
Corn	12	71					12		12	83	95		95
Coke		12								12	12		12
Cattle	2								2		2		2
Crockery and earthenware	77	49							77	49	126		126
Fish	17	1							17	1	18		18
Flour	60	126							60	126	186		186
Furniture	83	64							83	64	147		147
Glass all kinds	220	108							220	108	328		328
Hay pressed	1,225	107							1,225	107	1,332		1,332
Hogs													
Horses	11	17							11	17	28		28
Hides and leather	6	6							6	6	12		12
Iron, pig and bloom	70	17							70	17	87		87
" all other	1,078	321							1,078	321	1,399		1,399
" ore													
Other ores		419								419	419		419
Meal, all kinds	15	30							15	30	45		45
Dressed meats	16	20							16	20	36		36
Nails	525	43							525	43	568		568

Oats	46	428							46	428	474		474
Oil, in barrels	371	164							371	164	535		532
Oil cake	45	9							45	9	54	3	54
Pease		4								4	4		4
Potatoes	73	6							73	6	79		79
Pork and pork products	135	29							135	29	164		164
Paint	122	12							122	12	134		134
Rye													
Flaxseed													
Salt	2,154	406							2,154	406	2,560		2,560
Stone, all kinds		2								2	2		2
Sheep													
Steel	113	5							113	5	118		118
Whisky and all other spirits	441	162							441	162	603		603
Wheat	23	1,209							23	1,209	1,232		1,232
Wool													
All other goods and merchandise not enumerated	3,702	2,610							3,702	2,610	6,312		6,312
Floats													
Firewood, in vessels	5,556	1,047							5,556	1,047	6,603		6,603
Pulpwood													
Lumber, sawn, in vessels	6,366	12,285	1,998	4,051				222	8,364	16,558	24,922		24,922
" " rafts													
Masts, spars and telegraph poles in rafts		40								40	40		40
Railway ties, in vessels	272								272		272		372
Sawlogs	85	53							85	53	138		138
Shingles	185	50							185	50	235		235
Timber, square, in vessels	4								4		4		4
" " rafts	1,000								1,000		1,000		1,000
Other woods	1	10							1	10	11		11
Total freight	29,570	31,713	1,998	4,051				12,308	41,568	48,072	89,640	12,121	77,519

TABLE 7.—(No. 11.)—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Peters Canal during the Season of Navigation in 1908.

Articles.	From Canadian to Canadian ports.		From Canada to United States ports.		From United States to United States ports.		From United States to Canadian ports.		Tons.		Total tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		United States.	Canada.
Agricultural products not enumerated, vegetable	1,026								1,026		1,026		
Agricultural products not enumerated, animal	10								10		10		
Agricultural implements	3								3		3		
Barley	10								10		10		
Bricks	56								56		56		
Bones													
Buckwheat													
Cement and water lime	94	1,002							94	1,002	1,096		
Clay, lime and sand	2	15							2	15	17		
Coal, hard	626								626		626		
Coal, soft	110	40,755							110	40,755	40,865		
Corn	37								37		37		
Coke													
Cattle	9								9		9		
Crockery and earthenware	27								27		27		
Fish	188	1,884							188	1,884	2,072		
Flour	1,338	45							1,338	45	1,383		
Furniture	20	1							20	1	21		
Glass, all kinds	83	2							83	2	85		
Hay, pressed	1,283	23							1,238	23	1,261		
Hogs	2								2		2		
Horses	1								1		1		
Hides and leather	3								3		3		
Iron, pig and bloom	4								4		4		
Iron, all other	31	135							31	135	166		
Iron ore		20								20	20		
Other ores		244								244	244		
Meal, all kinds	484								484		484		

Meats, dressed	26								26		26		
Nails	69								69		69		
Oats	3,542	24							3,542	24	3,566		
Oil, in barrels	368	65							368	66	433		
Oil cake													
Pease													
Potatoes	5,432	36							5,432	36	5,468		
Pork and pork products	182								182		182		
Paint	49								49		49		
Rags													
Rye													
Flaxseed													
Salt	370	50							370	50	420		
Stone, all kinds		4,602								4,602	4,602		
Sheep	6								6		6		
Steel													
Whisky and all other spirits	37								37		37		
Wheat													
Wool													
All other goods and merchandise not enumerated	1,540	137							1,540	137	1,677		
Floors													
Firewood, in vessels	30	119							30	119	149		
Pulpwood													
Lumber, sawn, in vessels	4,462	191							4,462	191	4,653		
Lumber, sawn, rafts													
Mats, spars, and telegraph poles	15								15		15		
Railway ties, in vessels	140	100							140	100	240		
Saw logs	80	50							80	50	130		
Shingles	423								423		423		
Timber, square, in vessels	132	70							132	70	202		
Timber, square, rafts													
Wood, other	115	25							115	75	140		
Total freight	22,420	49,595							22,420	49,595	72,015		

APPENDIX A—*Continued.*

TABLE 7.—(No. 11.) —GENERAL STATEMENT showing the Quantity of each Article Transported on the Trent Valley Canals during the Season of Navigation in 1908.

Articles.	From Canadian to Canadian ports.		From Canadian to United States ports.		From United States to United States ports.		From United States to Canadian ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		United States.	Canadian.
Agricultural products not enumerated, vegetable	14								14		14		
Agricultural products not enumerated, animal	13	41							13	41	54		
Agricultural implements	9	10							9	10	19		
Barley	3								3		3		
Bricks	242	230							242	230	472		
Bones													
Buckwheat													
Cement and water lime	479	77							479	77	556		
Clay, lime and sand													
Coal, hard	61	23							61	23	84		
" soft	66								66		66		
Corn													
Coke													
Cattle	18	34							18	34	52		
Crockery and earthenware	18								18		18		
Fish													
Flour	3	14							3	14	17		
Furniture	16	19							16	19	35		
Glass, all kinds													
Hay, pressed	21	2							21	2	23		
Hogs	238	39							238	39	277		
Horses		9								9	9		
Hides and leather	3								3		3		
Iron, pig and bloom	3	5							3	5	8		
" all other	10	12							10	12	22		
Iron ore													
Other ores		5								5	5		
Meal, all kinds	1	16							1	16	17		

Meats, dressed	1	1							1	1	2		
Nails													
Oats	18	3							18	3	21		
Oil, in barrels	9	2							9	2	11		
Oil cake													
Pease	64								64		64		
Potatoes	172								172		172		
Pork													
Paint													
Rye	11								11		11		
Flaxseed													
Salt		6								6	6		
Stone	787	11,645							787	11,645	12,432		
Sheep	1	1							1	1	2		
Steel													
Whisky and all other spirits	6	5							6	5	11		
Wheat	398	18							398	18	416		
Wool													
All other goods and merchandise not enumerated	964	447							964	447	1,411		
Floats	1,114	3,822							1,114	3,822	4,936		
Firewood, in vessels	3,189	38,036							3,189	38,036	41,225		
Pulpwood													
Lumber, sawn, in vessels	862	1,721							862	1,721	2,583		
" " rafts	575	1,521							575	1,521	2,096		
Masts, spars, and telegraph poles, in rafts													
Railway ties, in vessels													
Sawlogs	225	10,061							225	10,061	10,286		
Shingles	49	100							49	100	149		
Timber, square, in vessels	1,840	125							1,840	125	1,965		
" " rafts	280	1,590							280	1,590	1,870		
Other woods	57	210							57	210	267		
Total freight	11,840	69,850							11,840	69,850	81,690		

TABLE 7.—(No. 12.)—GENERAL STATEMENT showing the Quantity of each Article transported on the Murray Canal during the Season of Navigation in 1908.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		United States.	Canadian.
Agricultural products not enumerated, vegetable	683	541	1	2				1	684	544	1,228	1	1,227
Agricultural products not enumerated, animal	135	162							135	162	297		297
Agricultural implements	2	11						2	2	13	15	2	13
Barley		200								200	200		200
Bricks													
Buckwheat													
Cement and water lime	1,375	41							1,375	41	1,416		1,416
Clay, lime and sand	750	50							750	50	800		800
Coal, hard								397		397	397	397	
" soft	1,030	508						12,892	1,030	13,400	14,430	12,892	1,538
Corn													
Coke													
Cattle													
Crockery and earthenware	106	134							106	134	240		240
Fish	2								2		2		2
Flour													
Furniture	101	69							101	69	170		170
Glass, all kinds	254	284						1	254	285	539	1	538
Hay, pressed													
Hogs													
Horses	5	1	1					1	6	2	8	1	7
Hides and leather	7								7		7		7
Iron, pig and bloom	35	67							35	67	102		102
" all other	156	276							156	276	432		432
Iron ore	15								15		15		15
Other ores													

Meal, all kinds													
Dressed meats													
Nails	70	80							70	80	150		150
Oats													
Oil, in barrels	76	200		3					76	203	279		279
Oil cake													
Pease	12	12							12	12	24		24
Potatoes													
Pork		1								1	1		1
Paint	134	131							134	131	265		265
Rye													
Flaxseed													
Salt	20	10							20	10	30		30
Stone													
" all kinds		175								175	175		175
Sheep													
Steel	35	323							35	323	358		358
Spirits, beer, &c	124	388							124	388	512		512
Wheat													
Wool													
All other goods and merchandise not enumerated	1,408	1,716	69	1				12	1,477	1,729	3,206	12	3,194
Floats													
Firewood, in vessels													
Pulpwood	1								1		1		1
Lumber, sawn, in vessels	133								133		133		133
" rafts													
Masts, spars and telegraph poles													
" " in rafts	23		25						48		48		48
Railway ties, in vessels	17								17		17		17
Sawlogs													
Shingles	8		16						24		24		24
Timber, square, in vessels													
" rafts													
Other woods			380						380		380		380
Total freight	6,717	5,380	492	6				13,306	7,209	18,692	25,901	13,306	12,595

TABLE 7.—(No. 13.)—GENERAL STATEMENT showing the Quantity of each Article transported on the Sault Ste. Marie Canal during the Season of Navigation in 1908.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		U. States.	Canadian.
Agricultural products not enumerated, vegetable	40	298				5,707			40	6,005	6,045	5,707	338
Agricultural products not enumerated, animal													
Agricultural implements	3,682								3,682		3,682		3,682
Barley		31,528		4,504		79,535				115,567	115,567	77,583	37,984
Bricks	680								680		680		680
Buckwheat													
Cement and lime	28,908		270		9,401		580		39,159		39,159	8,821	30,338
Clay and sand		375								375	375		375
Coal, hard	5,186				237,186		90,577	5,800	332,949	5,800	338,749	338,749	
" soft	35,633				1,150,984	34,950	826,393	23,400	1,993,010	58,350	2,051,360	2,050,674	686
Corn													
Coke	40								40		40		40
Cattle													
Crockery and earthenware	46								40		40		40
Fish		53								53	53		53
Flour	82	83,917	55			104,298		4,815	137	193,030	193,167	100,058	93,109
Furniture													
Glass, all kinds	119								119		119		119
Hay, pressed													
Hogs													
Horses	2								2		2		2
Hides and leather	4								4		4		4
Iron, pig and bloom	24,221					13,287	3,366		27,587	13,287	40,874	16,653	24,221
" all other	47,929	3,723	545		20,910	224	6,350	630	75,734	4,577	80,311	25,852	54,459
Iron ore		121,423		10,050		7,185,745	22,752	45,133	22,752	7,362,351	7,385,103	7,280,341	104,762
Copper ore						8,855				8,855	8,855	8,734	121
Other ore	533								533		533		533

Meal, all kinds		953				4,526		50		5,529	5,529	4,440	1,059
Dressed meat													
Nails	1,036								1,036		1,036		1,036
Oats	1,824	127,143		4,053		22,702		648	1,824	154,546	156,370	18,883	137,487
Oil, in barrels													
Oil cake													
Pease													
Potatoes													
Pork and pork products													
Paint	20								20		20		20
Rye		14				12,458		728		13,200	13,200	13,186	14
Flax seed		30,205		2,884		138,954				172,043	172,043	137,554	34,489
Salt	6,100	100	1,551		6,121		521		14,293	100	14,393	6,407	7,986
Stone, all kinds	68				10,402				10,470		10,470	10,402	68
Sheep													
Steel	18,745	80			5,393		300		24,438	80	24,518	5,693	18,825
Whisky and all other spirits	96								96		96		96
Wheat		1,073,116		180,683		367,082		136,340		1,757,221	1,757,221	484,156	1,273,065
Wool													
All other goods and merchandise not enumerated	193,295	9,029	15,406		43,182	11,661	3,628	682	255,511	21,372	276,883	52,790	224,093
Floats	584	84							584	84	668		668
Fire wood, in vessels		330								330	330		330
Lumber, sawn, in vessels	7,617	4,194	117	28,145	217	14,347	821		8,768	46,686	55,454	15,887	39,567
" " in rafts	14	5			625				639	5	644	625	19
Masts, spars and telegraph poles, in rafts													
Railway ties, in vessels	1,353								1,353		1,353		1,353
Saw logs	150	119		14					150	133	283		283
Shingles						3,790				3,790	3,790	3,790	
Timber, square, in vessels	197								197		197		197
" " in rafts													
Other woods													
Total freight	378,198	1,486,689	17,940	230,333	1,464,421	8,008,121	955,288	218,226	2,815,847	9,943,369	12,759,216	10,666,985	2,092,231

TABLE 8.—STATEMENT showing the Classified Tonnage of all kinds of

WELLAND

CANADIAN.

Class.	Steam Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
1	250 to 1,728 tons	80	74,719	1	250 to 1,226 tons	14	6,251
2	200 " 249 "	4	880	2	200 " 249 "	4	870
3	150 " 199 "	6	965	3	150 " 199 "	6	900
4	100 " 149 "	5	620	4	100 " 149 "	6	600
5	50 " 99 "	7	470	5	50 " 99 "	7	435
6	Under 50 "	73	988	6	Under 50 "	14	174
	Total	175	78,642		Total	51	9,230

ST. LAWRENCE

1	250 to 1,597 tons	66	53,062	1	250 to 1,453 tons	78	36,686
2	200 " 240 "	4	895	2	200 " 249 "	10	2,150
3	150 " 199 "	10	1,670	3	150 " 199 "	51	8,365
4	100 " 149 "	9	995	4	100 " 149 "	96	11,615
5	50 " 99 "	20	1,430	5	50 " 99 "	45	3,585
6	Under 50 "	173	2,162	6	Under 50 "	20	423
	Total	282	60,214		Total	300	62,824

RIDEAU, OTTAWA

1	250 to 678 tons	3	1,345	1	250 to —— tons	4	1,060
2	200 " 249 "			2	200 " 249 "	2	410
3	150 " 199 "	3	500	3	150 " 199 "	46	7,424
4	100 " 149 "	6	700	4	100 " 149 "	43	5,230
5	50 " 99 "	20	1,215	5	50 " 99 "	14	875
6	Under 50 "	259	2,496	6	Under 50 "	44	810
	Total	291	6,256		Total	153	15,809

SESSIONAL PAPER No. 20a

Vessels passed through the Canals during the Season of Navigation in 1908.

CANAL.

UNITED STATES.

Class.	Steam Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
1	250 to 1,673 tons	64	55,832	1	250 to 970 tons	9	6,818
2	200 " 249 "	....	....	2	200 " 249 "	2	460
3	150 " 199 "	....	....	3	150 " 199 "	....	....
4	100 " 149 "	5	575	4	100 " 149 "	1	100
5	50 " 99 "	17	1,080	5	50 " 99 "	2	150
6	Under 50 "	50	599	6	Under 50 "	4	36
	Total	136	58,086		Total	18	7,564

CANALS.

1	250 to 1,552 tons	30	24,677	1	250 to 1,332 tons	10	7,368
2	200 " 249 "	....	....	2	200 " 249 "	1	200
3	150 " 199 "	....	....	3	150 " 199 "	....	....
4	100 " 149 "	1	120	4	100 " 149 "	20	2,145
5	50 " 99 "	7	490	5	50 " 99 "	94	6,010
6	Under 50 "	36	557	6	Under 50 "	1	30
	Total	74	25,844		Total	126	15,753

AND CHAMBLY CANALS.

1	250 to —— tons	....	....	1	250 to —— tons	....	....
2	200 " 249 "	....	....	2	200 " 249 "	....	....
3	150 " 199 "	....	....	3	150 " 199 "	9	1,435
4	100 " 149 "	2	205	4	100 " 149 "	441	45,870
5	50 " 99 "	2	145	5	50 " 99 "	162	15,090
6	Under 50 "	36	477	6	Under 50 "	5	160
	Total	40	827		Total	617	62,555

APPENDIX B.

DOMINION CA ALS.

The canal systems of the Dominion, under government control in connection with lakes and navigable rivers, are as follows:—

First—The through route between Montreal and the head of Lake Superior (14 feet minimum depth of water.)

	Miles.
1. Lachine canal	8½
Lake St. Louis and River St. Lawrence	16
2. Soulanges canal	14
Lake St. Francis and River St. Lawrence	33
3. Cornwall canal	11
River St. Lawrence	5
4. Farran's Point canal	1½
River St. Lawrence	10
5. Rapide Plat canal	3⅜
River St. Lawrence	4
6. Galops canal	7⅓
River St. Lawrence and Lake Ontario	236
7. Welland canal	26¾
Lake Erie, Detroit river, Lake St. Clair, Lake Huron, &c.	580
8. Sault Ste. Marie canal	1¼
Lake Superior to Port Arthur	266
Total	1,223 7/12
To Duluth	1,357
Chicago	1,286

Second.—Ottawa to Lake Champlain.

1. Grenville. 2. Carillon. 3. St. Anne's. 4. Chambly. 5. St. Ours canals.

Third.—Ottawa to Kingston and Perth.

1. Rideau canal.

Fourth.—Lake Ontario at Trenton to Lake Huron at mouth of River Severn.

1. Trent canal (not completed).

Fifth.—Ocean to the Bras d'Or lakes.

1. St. Peter's canal.

RIVER ST. LAWRENCE AND LAKES.

The River St. Lawrence with the system of canals established on its course above Montreal, and the Lakes Ontario, Erie, St. Clair, Huron and Superior, with connecting canals, afford a course of water communication extending from the Straits of Belle Isle to Port Arthur, at the head of Lake Superior, a distance of 2,200 statute miles. The distance to Duluth is 2,343 statute miles. The distance to Chicago, 2,272 miles.

From the Straits of Belle Isle, at the mouth of the St. Lawrence, to Montreal, the distance is 986 miles. From Quebec to Montreal, the distance is 160 miles. Owing to the shallowness of the waters on a portion of the river between these two places, particularly through Lake St. Peter, vessels drawing more than from ten to twelve feet were formerly barred from passage for the greater part of the season of navigation. In 1826, the question of deepening the channel was first definitely mooted, but it was not until 1844 that any dredging operations were begun. In that year, the deepening of a new straight channel was commenced, but thte scheme was abandoned in 1847. In 1851 the deepening of the present channel was begun. At that time the depth of the channel at low water was 10 feet 6 inches. By the year 1869, this depth had been increased to 20 feet, by 1882 to 25 feet, and by the close of 1888 the depth of 27½ feet, at low water, was attained for a distance of 108 miles from Montreal to a point within tidal influence. This work is now being continued by the government of Canada, which in 1888, under the provisions of the Act 51 Vic., ch. 5, of that year, assumed the indebtedness. The channel has a minimum width of 300 feet, extending to 550 feet at points of curvature. The channel is lighted and buoyed.

Navigation, which is closed by ice during the winter months, opens about the end of April.

Montreal has by this work been placed at the head of ocean navigation, and here the canal systems of the River St. Lawrence begin, overcoming the various rapids by which the river channel upwards is obstructed, and giving access through the St. Lawrence canals, the Welland canal, the great lakes and the Sault Ste. Marie canal, to the head of Lake Superior.

The difference in level between the point on the St. Lawrence, near Three Rivers, where tidal influence ceases, and Lake Superior, is about 600 feet.

The Dominion canals, constructed between Montreal and Lake Superior, are the Lachine, Soulanges, Cornwall, Farran's Point, Rapide Plat, Galops, Murray, Welland and Sault Ste. Marie. Their aggregate length is 73 miles; total lockage (or height directly overcome by locks), 551 feet. The number of locks through which a vessel would pass in its passage from Montreal, at the head of ocean navigation, to the head of Lake Superior is 48. The Soulanges canal takes the place of the Beauharnois canal; the latter may be abandoned for navigation purposes.

Communication between Lakes Huron and Superior is obtained by means of the Canadian Sault Ste. Marie canal, and also by the St. Mary's Falls canal, situated on the United States side of the River St. Mary. Both these canals are free of toll.

It is important to note that the enlargement of the canals on the main route between Montreal and Lake Erie comprises locks of the following minimum dimensions: Length, 270 feet; width, 45 feet; depth of water on sills, 14 feet. The length of the vessels to be accommodated is limited to 255 feet. At Farran's, in the canal of that name, the lock is 800 feet long. A similar lock is built at Iroquois on the Galops canal, the object being to pass a full tow at one lockage.

LACHINE CANAL.

First construction	commenced	1821
"	completed	1825
First enlargement	commenced	1843
"	completed	1848
Second enlargement	commenced	1873
"	completed	1901
Length of canal		8½ statute miles.
Number of locks		5
Dimensions of locks		270 feet by 45 feet.
Total rise of lockage		45 feet.
Depth of water on sills	at two locks	18 "
	at three locks	14 "
Average width of new canal		150 "

The old lift locks, 200 feet by 45 feet, are still available, with 9 feet of water on mitre sills.

The canal consists of one channel, with two distinct systems of locks, the old and the enlarged. There are two lock entrances at each end.

The canal extends from the city of Montreal to the town of Lachine, overcoming the St. Louis rapids, the first of the series of rapids which bars the ascent of the River St. Lawrence. They are 986 miles distant from the Straits of Belle Isle.

SOULANGES CANAL.

Construction commenced		1892
Open for traffic		1899
Length of canal		14 statute miles.
Number of locks	lift	4
	guard	1
Dimensions of locks		280 feet by 45 feet.
Total rise of lockage		84 feet
Depth of water on sills		15 "
Breadth of canal at bottom		100 "
Breadth of canal at water surface		164 "
Number of arc lights		219 of 2,000 c. p. each.

The canal extends from Cascade point to Coteau Landing, overcoming the Cascade Rapids, Cedar rapids and Coteau rapids.

From the head of the Lachine to the foot of the Soulanges, the distance is sixteen miles.

CORNWALL CANAL.

First commenced, 9 feet		1844
" opened		1847
Enlargement commenced		1897
" completed		1900
Length of canal		11 statute miles.
Number of locks		6
Dimensions of locks		270 feet by 75 feet.
Total rise of lockage		48 feet.
Depth of water on sills		14 "
Breadth of canal at bottom		100 "
Breadth of canal at water surface		164 "

The old lift locks, 200 feet by 45 feet, are also available, with nine feet of water on mitre sills.

From the head of the Soulanges to the foot of the Cornwall canal there is a stretch through Lake St. Francis, of 32¾ miles, which is being made navigable for vessels drawing fourteen feet.

The Cornwall canal extends past the Long Sault rapids from the town of Cornwall to Dickinson's landing.

WILLIAMSBURG CANALS.

The Farran's Point, Rapide Plat and Galops canals are collectively known as the Williamsburg Canals.

FARRAN'S POINT CANAL.

First commenced, 9 feet	1844
" opened	1847
Enlargement commenced	1897
" completed	1900
Length of canal	1½ miles.
Number of locks	1
New lock	800 feet by 45 feet
Old lock	200 "
Total rise or lockages	3½ feet.
Depth of water on sills of new lock	14 "
Depth of water on sills of old lock	9 "
Breadth of canal at bottom	90 "
Breadth of canal at water surface	154 "

From the head of the Cornwall canal to the foot of Farran's Point canal, the distance on the River St. Lawrence is five miles. The latter canal enables vessels ascending the river to avoid Farran's Point rapid, passing the full tow at one lockage. Descending vessels run the rapids with ease and safety.

RAPIDE PLAT CANAL.

First commenced, 9 feet	1844
" opened	1847
Enlargement commenced	1884
" completed	1897
Length of canal	3⅝ miles.
Number of locks	2
Dimensions of locks	270 feet by 45 feet.
Total rise in lockage	11½ feet.
Depth of water on sills	14 "
Breadth of canal at bottom	80 "
Breadth of canal at surface of water	152 "

The old lift lock, 200 feet by 45, is also available, with nine feet of water on mitre sills.

From the head of Farran's Point canal to the foot of Rapide Plat canal, there is a navigable stretch of 10½ miles. This canal was formed to enable vessels ascending the river to pass the rapids at that place. Descending vessels run the rapids safely.

GALOPS CANAL.

First commenced, 9 feet	1844
Opened	1846
Enlargement commenced	1888
" completed	1903
Length of canal	7¾ miles.
Number of locks	3
Dimensions of locks. { one of which is a guard lock.	2–270 by 45.
	1–800 by 45.
Total rise of lockage	15½ feet.
Depth of water on sills	14 "
Breadth of canal at bottom	80 "
Breadth of canal at surface of water	144 "

From the head of Rapide Plat canal to Iroquois, at the foot of the Galops canal, the St. Lawrence is navigable 4½ miles. The canal enables vessels to overcome the rapids at Pointe aux Iroquois, Point Cardinal and the Galops.

MURRAY CANAL.

Construction begun	1882
Completed	1890
Length between eastern and western pier heads	5⅛ miles.
Breadth at bottom	80 feet.
Breadth at water surface	120
Depth below lowest known lake level	11

No locks.

This canal extends through the Isthmus of Murray, giving connection westward between the head waters of the Bay of Quinte and Lake Ontario, and thus enabling vessels to avoid the open lake navigation.

WELLAND CANAL.

Main line from Port Dalhousie, Lake Ontario, to Port Colborne, Lake Erie.

	Old Line.	Enlarged or New Line.
Length of Canal	27½ miles	26¾ miles
Pairs of guard-gates (formerly 3)		2
Number of locks { lift	26	25
guard	1	1
Length of canal		
Dimensions { 1 lock 200 x 45; 1 lock 200 x 45; 1 (tidal) 230 x 45; 24 locks 150 x 45		270 feet x 45 feet.
Total rise or lockage 326¾ feet	326¾ feet	326¾ feet.
Depth of water on sills	10¼ "	14 "
Construction commenced, 10 feet 3 inches		1824
" Completed		1833
Enlargement commenced, 14 feet		1872
" completed		1887

WELLAND RIVER BRANCHES.

Length of canal—	
Port Robinson cut to River Welland	2,622 feet.
From the canal at Welland to the river, via lock at Aqueduct	300 "
Chippewa cut to River Niagara	1,020 "
Number of locks—one at Aqueduct and one at Port Robinson	2
Dimensions of locks	150 by 26½ feet.
Total lockage from the canal at Welland down to River Welland	10 feet.
Depth of water on sills	9 feet 10 inches.

GRAND RIVER FEEDER.

Length of canal	21 miles.
Number of locks	2
Dimensions of locks	1 of 150 by 26½ feet. 1 of 200 by 45 feet.
Total rise or lockage	7 to 8 feet.
Depth of water on sills	9 feet.

PORT WELLAND BRANCH.

Length of canal	1¾ miles.
Number of locks	1
Dimensions of locks	185 feet by 45 feet.
Total rise or lockage	7½ feet.
Depth of water on sills	11 "

The Welland canal has two entrances from Lake Ontario, at Port Dalhousie, one for the old, the other for the new canal.

From Port Dalhousie to Allanburg, 11¾ miles, there are two distinct lines of canal in operation, the old line and the enlarged or new line.

From Allanburg to Port Colborne, a distance of 15 miles, there is only one channel, the old canal having been enlarged.

From the head of the Welland canal there is a deep water navigation through Lake Erie, the Detroit river, Lake St. Clair, the St. Clair river, Lake Huron and River St. Mary to the Sault canal, a distance of about 580 miles. From the Sault the distance through Lake Superior to Port Arthur is 266 miles, and to Duluth 400 miles.

SAULT STE. MARIE CANAL.

Construction commenced	1888
Opened for traffic	1895
Length of canal, between the extreme ends of the entrance piers	5,967 feet.
Number of locks	1
Dimensions of locks	900 feet by 60 feet.
Depth of water on sills (at lowest known water level)	20 feet by 3 inches.
Total rise or lockage	18 feet.
Breadth of canal at bottom	141 feet 8 inches.
Breadth at surface of water	150 feet.

This canal has been constructed through St. Mary's island, on the north side of the rapids of the River St. Mary, and, with that river, gives communication on Canadian territory between Lakes Huron and Superior. The masonry pier of the bridge carrying the Canadian Pacific Railway over the canal, which stood in the channel of the canal, forming an obstruction to navigation, has been removed; the swing now spanning the full width of the channel or prism of the canal.

MONTREAL, OTTAWA AND KINGSTON.

This route extends from the harbour of Montreal to the port of Kingston, passing through the Lachine canal, the navigation section of the lower River Ottawa, and the Ottawa canals, to the city of Ottawa; thence by the River Rideau and the Rideau canal to Kingston, on Lake Ontario—a total distance of 245⅝ miles.

After leaving the Lachine canal the works constructed to overcome difficulties of navigation are:—

Ottawa River Canals.

The Ste. Anne's lock.
Carillon canal.
Grenville canal.
Rideau canal.

The total lockage (not including that of the Lachine canal) is 509 feet (345 rise, 164 fall)—and the number of locks is 55.

The following table exhibits the intermediate distances from Montreal harbour:—

Sections of Navigation.	Intermediate Distance.	Total Distance, from Montreal.
	Miles.	Miles.
The Lachine canal	8½	
From Lachine to Ste. Anne's lock	15	23
Ste. Anne's lock and piers	⅛	23
Ste. Anne's lock to Carillon canal	27	50
The Carillon canal	¾	51
The Carillon to Grenville canal	6¼	57
The Grenville canal	5¾	63
From the Grenville canal to entrance of Rideau navigation	56	119
Rideau navigation ending at Kingston	126¼	245

STE. ANNE'S LOCK.

Construction commenced	1814.
" completed	1816
Rebuilt of wood	1833
" in masonry	1843.

	Old Lock.	New Lock.
Length of canal	⅛ mile.	⅛ mile.
Number of locks	1	1
Dimensions of locks	190 x 45 feet.	200 x 45 feet.
Total rise or lockage	3 feet.	3 feet.
Depth of water on sills	6 "	9 "

This work, with guide piers above and below, surmounts the Ste. Anne's rapids between Ile Perrot and the head of the Island of Montreal, at the outlet of that portion of the River Ottawa which forms the Lake of Two Mountains, 23½ miles from Montreal harbour.

THE CARILLON CANAL.

Construction commenced	1819
" completed	1833
Enlargement commenced	1871
" completed	1887
Length of canal	¾ mile.
Number of locks	2
Dimensions of locks	200 x 45 feet.
Total rise or lockage	16 feet.
Depth of water on sills	9 "
Breadth of canal at bottom	100 "
Breadth of canal at water surface	110 "

This canal overcomes the Carillon rapids.

From Ste. Anne's lock to the foot of the Carillon canal there is navigable stretch of 27 miles, through the Lake of Two Mountains and the River Ottawa.

By the construction of the Carillon dam across the River Ottawa the water at that point is raised 9 feet, enabling the river above to be used for navigation.

GRENVILLE CANAL.

Construction commenced	1819
" completed	1833
Enlargement commenced	1871
" completed	1887
Length of canal	5¾ miles.
Number of locks	5
Dimensions of locks	200 x 45 feet.
Total rise or lockage	43¾ feet.
Depth of water on sills	9 "
Breadth of canal at bottom	40 to 50 feet.
Breadth of canal at surface of water	50 to 80 "

This canal, by which the Long Sault rapids are avoided, is about 56 miles below the city of Ottawa, up to which point the River Ottawa affords unimpeded navigation.

RIDEAU NAVIGATION.

Construction commenced	1826
" completed	1832

The Rideau system connects the River Ottawa, at the city of Ottawa, with the eastern end of Lake Ontario, at Kingston.

Length of navigation waters	126¼ miles.
Number of locks going from Ottawa to Kingston	35 ascending. 14 descending.
Total lockage.....446½ feet	282¼ rise and 164 fall at high water.
Dimensions of locks	134 x 33 feet.
Depth of water on sills	5 feet.
Navigation depth through the several reaches	4½ "
Breadth of canal reaches at bottom	60 feet in earth. 54 feet in rock.
Breadth of canal at surface of water	80 feet in earth.

PERTH BRANCH.

Construction commenced	1883	
" completed	1892	
Length of canal	7	miles.
Number of locks	2	
Dimensions of locks	134	feet x 33 feet.
Total rise or lockage	26	"
Depth of water on sills	5	" 6 inches.
Length of dam	200	"
Breadth of canal at bottom	40	"
Breadth of canal at surface of water	40	" in rock.
	60	" in clay.

The Perth branch of the Rideau canal affords communication between Beveridge's bay, on Lake Rideau and the town of Perth.

The summit level of the Rideau system is at upper Lake Rideau, but several of the descending reaches are also supplied by waters which have been made tributary to them. The following description gives the sources of supply:—

From the summit, the route towards Ottawa follows the Rideau river, and that towards Kingston follows the River Cataraqui. The supply of water for the canal is derived from the reserves given in detail below.

These may be divided into three systems, viz.:—

1. The summit level, supplied by the Wolfe lake system.

2. The eastern descending level to Ottawa, supplied by the River Tay system, discharging into Lake Rideau.

3. The southwest descending level to Kingston, supplied by the Mud lake system formerly known as the Devil lake system, discharging into Lake Openicon.

Lake Openicon receives the waters of Buck lake and Rock lake.

All these waters on the descending level, supplemented by those of Lake Loughboro', flow into Cranberry lake, which, discharging through Round Tail outlet, forms the River Cataraqui. The river, rendered navigable by dams at various points, affords a line of navigation to Kingston.

RICHELIEU AND LAKE CHAMPLAIN.

This system, commencing at Sorel, at the confluence of the Rivers St. Lawrence and Richelieu, 46 miles below Montreal, extends along the River Richelieu, through the St. Ours lock to the basin of Chambly; thence, by the Chambly canal, to St. Johns, and up the River Richelieu to Lake Champlain. The distance from Sorel to the boundary line is 81 miles.

At Whitehall, the southern end of Lake Champlain is entered, and connection is obtained with the River Hudson, by which the city of New York is directly reached. From the boundary line to New York the distance is 330 miles.

The following table shows the distances between Sorel and New York:—

Section of Navigation.	Intermediate Distance.	Total Distances.
	Miles.	Miles.
Sorel to St. Ours lock	14	14
St. Ours lock to Chambly canal	32	46
Chambly canal	12	58
Chambly canal to boundary line	23	81
Boundary line to Champlain canal	111	192
Champlain canal to junction with Erie canal	66	258
Erie canal, from junction to Albany	7	265
Albany to New York	146	411

ST. OURS LOCK DAM.

Construction commenced	1844	
" completed	1849	
Length	⅛	mile.
Number of locks	1	"
Dimensions of lock	200	feet by 45 feet.
Total rise of lockage	5	"
Depth of water on sills	7	feet at low water.
Length of dam in eastern channel	300	"
Length of dam in western channel	690	"

At St. Ours, 14 miles from Sorel, the River Richelieu is divided by a small island into two channels. The St. Ours lock is in the eastern channel.

There is a navigable depth in the Richelieu of 7 feet between St. Ours lock and Chambly basin, a distance of 32 miles.

CHAMBLY CANAL.

Construction commenced	1831		
" completed	1843		
Length of canal	12	miles.	
Number of locks	9		
Dimensions of locks:—			
Guard lock, No. 1 at St. Johns	122	feet.	
Lift " 2	124	"	From 22½ to 24 feet wide.
" " 3, 4, 5, 6	118	"	
" " 7, 8, 9 combined	125	"	
Total rise or lockage	74	"	
Depth of water on sills	7	"	
Breadth of canal at bottom	36	".	
Breadth of canal at surface of water	60	"	

This canal succeeds the 32 miles of navigable water between St. Ours lock and Chambly basin. The canal overcomes the rapids between Chambly and St. Johns.

TRENT CANAL.

The term 'Trent canal' is applied to a series of water stetches ,which do not, however, form a connected system of navigation, and which, in their present condition, are efficient only for local use. By various works this local use has been extended, and by others, now in progress and contemplation, this will become a through route between Lake Ontario and Lake Huron.

The series is composed of a chain of lakes and rivers, extending from Trenton, at the mouth of the River Trent, on the Bay of Quinté, Lake Ontario, to Lake Huron.

Many years ago the utilizing of these waters for the purpose of through water communication between Lake Huron and Lake Ontario was projected.

The course, as originally contemplated and modified, is as follows:—

Through the River Trent, Rice lake, the River Otonabee and Lakes Clear, Stony, Lovesick, Deer, Buckhorn, Chemong, Pigeon, Sturgeon and Cameron to Lake Balsam, the summit water, about 165 miles from Trenton; from Lake Balsam by a canal and the River Talbot to Lake Simcoe; thence by the River Severn to Georgian bay, Lake Huron; the total distance being about 200 miles, of which only about 15 or 20 miles will be actual canal.

The full execution of the scheme, commenced by the Imperial Government in 1837, was deferred. By certain works, however, below specified, sections of these

waters have been made practicable for navigation, and the whole scheme is now being carried out. A branch of the main route, extending from Sturgeon lake south, affords communication with the town of Lindsay, and, through Lake Scugog to Port Perry, a distance of 190 miles from Trenton.

The following table gives the distance of navigable and unnavigable reaches:—

From Trenton, Bay of Quinté to Nine Mile rapids ..	—	9
Nine Mile rapids to Percy landing..	19½	—
Percy landing to Heeley's Falls dam..	—	14½
Heeley's Falls dam to Peterborough..	51¾	—
Peterborough to Lakefield..	—	9
Lakefield to a point across Balsam lake..	61	—
	132¼	32½
Total distance, Bay of Quinté to a point across Balsam lake..		165
From Sturgeon point on Sturgeon lake, 48¾ miles from Lakefield, the branch through the town of Lindsay to Port Perry at the head of Lake Scugog..		27

The works by which the Trent navigation has been improved comprise canals, with locks and bridges, at Young's point, Burleigh rapids, Lovesick, Buckhorn rapids, Bobcaygeon, Fenelon falls and Rosedale; also dams at Lakefield, Young's point, Burleigh falls, Lovesick, Buckhorn, Bobcaygeon and Fenelon falls. By these works there is afforded communication between Lakefield, 9½ miles from Peterborough, and Balsam lake, the headwaters of the system; opening up a total of about 160 miles of direct and lateral navigation.

At Lakefield, 9½ miles from Peterborough, the dam at the head of the Nine Mile rapids of the River Otonabee maintains navigation on Lake Katchewannoe up to Young's point.

At Young's point, 5 miles from Lakefield, the dam between Lake Katchemannoe and Clear lake controls the water level through Clear and Stony lakes up to the foot of the Burleigh canal.

At Burleigh rapids, 10 miles from Young's point, a canal, about 2¼ miles in length, passes the Burleigh and Lovesick rapids, and gives communication between Stony lake and Deer bay.

At Buckhorn rapids, 7 miles from Burleigh rapids, there is a canal about one-fourth of a mile long.

At Bobcaygeon, 15¾ miles from Buckhorn rapids, a dam, 553 feet long, controls the water level to Fenelon falls.

At Fenelon falls, 15 miles from Bobcaygeon, a canal about one-third of a mile in length connects Sturgeon lake with Cameron lake.

The following is a list of the locks, with their dimensions:—

1	Lock at Rosedale (maintained by the Ontario government), 100′ x 30′ x 4′ 6′ to 6′ 6″ depth water on mitre sill.				
2	Locks at Fenelon.... ..	134′ x 33′ x 5′ 0″ to	7′ 6″	depth water on	mitre sill.
1	" Lindsay	134′ x 33′ x 5′ 0″ to	7′ 6″	"	"
1	" Bobcaygeon ..	134′ x 33′ x 5′ 8″ to	7′ 0″	"	"
1	" Buckhorn	134′ x 33′ x 5′ 0″ to	9′ 0″	"	"
1	" Lovesick	134′ x 33′ x 5′ 0″ to	9′ 4″	"	"
2	" Burleigh	134′ x 33′ x 6′ 0″ to	8′ 0″	"	"
1	" Young's point.	134′ x 33′ x 5′ 0″ to	14′ 0″	"	"
1	" Peterborough .	134′ x 33′ x 5′ 0″ to	10′ 0″	"	"
1	" Hastings	134′ x 33′ x 7′ 0″ to	10′ 6″	"	"
1	" Chisholms . ..	134′ x 33′ x 5′ 0″ to	8′ 6″	"	"

ST. PETER'S CANAL, CAPE BRETON.

Construction commenced	1854
" completed	1869
Enlargement begun	1875
" completed	1881
Length of canal	About 2,400 feet.
Breadth at water line	50 feet.
Lock	One tidal lock, 4 pairs of gates.
Dimensions	200 feet by 48 feet.
Depth of water on sills	18 feet at lowest water.
Depth through canal	19 "
Extreme rise and fall of tide in St. Peter's bay	4 "

This canal connects St. Peter's bay on the northern side of Cape Breton, Nova Scotia, with the Bras d'Or lakes. It crosses an isthmus half a mile in width, and gives access from the Atlantic.

BEAUHARNOIS CANAL.

Construction begun	1842
" completed	1845
Length of canal	12 statute miles.
Number of locks	9
Dimensions of locks	200 feet by 45 feet.
Total rise or lockage	82½ "
Depth of water on sills	9 "
Breadth of canal at bottom	80 "
Breadth of canal at water surface	120 "

As the new Soulanges canal is now opened for navigation, the Beauharnois canal is abandoned for navigation purposes.

EARLIER CANALS.

A system of three canals preceded the Bearharnois. These were:—

COTEAU DU LAC CANAL.

Construction commenced	1779
" completed	1780

SPLIT ROCK CANAL.

Construction commenced	1779
" completed	1780

CASCADE POINT CANAL.

Construction commenced	1782
" completed	1783

The locks were 20 x 6 feet, and provided for a draft of 2 feet. In 1814 the work of widening them to 12 feet was begun, and finished in 1817.

Two canals were also constructed off Burlington Bay, Ontario. They were:—

BURLINGTON BAY CANAL.

Construction	commenced	1825
"	completed	1832

DESJARDINS CANAL.

Construction	commenced	1826
"	completed	1837

Neither of these canals required locks. They have for many years been abandoned. The depth of water provided in the first instance was 7½ feet.

ST. LAWRENCE NAVIGATION—TABLE OF DISTANCES.

FROM STRAITS OF BELLE-ILE TO PORT ARTHUR, AT HEAD OF LAKE SUPERIOR BY WATER.

From	To	Sections of Navigation.	Statute Miles. Intermediate.	Statute Miles. Total to Straits of Belle-Ile.
Straits of Belle-Ile	Cape Whittle	Gulf of St. Lawrence	240	240
Cape Whittle	West Point, Anticosti	"	201	441
West Point, Anticosti	Father Point	River St. Lawrence	202	643
Father Point	Rimouski	"	6	649
Rimouski	Bic	"	12	661
Bic	Isle Verte	"	39	700
Isle-Verte (opp. Saguenay)	Quebec	"	126	826
Quebec	Three Rivers	" to tide-water	74	900
Three Rivers	Montreal	"	86	986
Montreal	Lachine	Lachine Canal	8½	994½
Lachine	Cascade Point	Lake St. Louis	16	1,009¾
Cascade Point	Coteau Landing	Soulanges Canal	14	1,021
Coteau Landing	Cornwall	Lake St. Louis	30	1,053¾
Cornwall	Dickinson's Landing	Cornwall Canal	11½	1,065¼
Dickinson's Landing	Farran's Point	River St. Lawrence	5	1,070¼
Farran Point	Upper end of Croyle's Island	Farran's Point	¾	1,071
Upper end Croyle's Island	Williamsburg or Morrisburg	River St. Lawrence	10½	1,081½
Williamsburg	Rapide Plat	Rapide Plat Canal	4	1,085½
Rapide Plat	Point Iroquois Village	River St. Lawrence	4½	1,090
Point Iroquois Village	Upper end Presqu'Ile	Point Iroquois Canal	3	1,093
Presqu-Ile	Point Cardinal, Edwardsburg	Junction Canal	2⅝	1,095⅝
Point Cardinal	Head of Galops Rapids	Galops Canal	2	1,097⅝
Galops Rapids	Prescott	River St. Lawrence	7⅜	1,105
Prescott	Kingston	"	59	1,164
Kingston	Port Dalhousie	Lake Ontario	170	1,334
Port Dalhousie	Port Colborne	Welland Canal	26¾	1,360¾
Port Colborne	Amherstburg	Lake Erie	232	1,592¾
Amherstburg	Windsor	River Detroit	18	1,610¾
Windsor	Foot of St. Mary's Island	Lake St. Clair	25	1,635¾
Foot of St. Mary's Island	Sarnia	River St. Clair	33	1,668¾
Sarnia	Foot of St. Joseph Island	Lake Huron	270	1,938¾
Foot of St. Joseph's Island	Foot of Sault Ste. Marie	River Ste. Marie	47	1,985¾
Sault-Ste. Marie	Head of Sault Ste. Marie	Sault Ste. Marie Canal	1	1,986¾
Head of Sault Ste. Marie	Point aux Pins	River Ste. Marie	7	1,993¾
Pointe aux Pins	Port Arthur	Lake Superior	266	2,259¾
Port Arthur to Lake Shebandowan			45	
Lake Shebandowan to North-west Angle			312	
North-west Angle to Winnipeg			95	
Pointe aux Pins to Duluth			390	

Of the 2,259¾ miles from the Straits of Belle-Ile to the head of Lake Superior, 73½ miles are artificial navigation, and 2,188¾ open navigation.

Straits of Belle-Ile to Liverpool, 1,942 geographical or 2,234 statute miles.

The total fall from Lake Superior to tide-water is about 600 feet.

The steamboat voyage from Collingwood to Port Arthur is 532 miles.

" " Depot Harbour to Port Arthur is 510 miles; to Duluth is 644 miles; to Chicago 525 miles, and to Milwaukee, 442 miles.

SESSIONAL PAPER No. 20a

TABLE of distances of Stations between the cities of Ottawa and Kingston.

No. of Station.	Name of Station.	Distances from Ottawa.	Locks.		Dams.			Length of Artificial Canal at each Station in miles.
			No.	Lift at Low water.	No.	Length.	Height.	
		Miles.		Rise. Ft. In.		Feet.	Feet.	
1	Ottawa	0	8	82 0	3	230 1,320 1,616	13 33 14	
2	Hartwell's	4¼	2	22 0	....	100	28	4·00
3	Hogsback	5⅓	2	13 6	1	320	60	
4	Black Rapids	9½	1	10 0	1	300	12	0·13
5	Long Island	14⅝	3	27 0	3	850	68	0·13
6	Burritt's	40¾	1	10 6	1	240	14	1·50
7	Nicholson	43¾	2	15 2	1	500	9	0·50
8	Clowes	44½	1	10 0	1	481	16	0·05
9	Merrickville	46¾	3	25 0	1	150	6	0·33
10	Maitland	55	1	4 9	1	270	8	0·13
11	Edmunds	59½	1	10 10	1	343	8	0·06
12	Old Slys	60½	2	15 6	1	250	20	0·25
13	Smith's Falls	61½	4	33 9	2	600	24	0·13
14	First Rapids or Poonamalie	64	1	7 9	1	260	5	1·25
15	Narrows	83¼	1	4 0	1	600	9	0·06
	Total rise at low water			292 3				
				Fall				
16	Isthmus	87½	1	4 0	....	....	....	1·25
17	Chaffey	92	1	12 6	....	....	....	0·13
18	Davis	94½	1	9 0	1	300	15	0·06
19	Jones' Falls	97¼	4	60 0	1	300	60	0·25
20	Brewer's Upper Mills	108¼	2	19 0	1	200	20	1·75
21	" Lower Mills	110	1	14 2	1	200	12	4·25
22	Kingston Mills	120¼	4	46 8	1	6,042	14	0·25
23	Kingston	126¼	....	....	....	....	....	....
	Total fall at low water		....	165 4	....	....	....	....
	Total		47	....	24	15,472	....	16·46

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RAILWAY STATISTICS

OF THE

DOMINION OF CANADA

FOR THE

YEAR ENDED JUNE 30

1909

(From sworn Returns furnished by the several Railway Companies)

M. J. BUTLER

Deputy Minister and Chief Engineer
of the Department of Railways and Canals

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EXCELLENT MAJESTY
1909

[No. 20*b*—1910]

To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, in the County of Northumberland, in the Peerage of the United Kingdom, and a Baronet; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, &c., &c., &c., Governor General of Canada.

May it Please Your Excellency,

The undersigned has the honour to present to Your Excellency the Annual Report of the Comptroller of Statistics for the year ended June 30, 1909.

GEO. P. GRAHAM,
Minister of Railways and Canals.

To the Honourable GEORGE P. GRAHAM,

Minister of Railways and Canals.

SIR,—I have the honour to submit the annual report of the Comptroller of Statistics for the year ended June 30, 1909.

This is the third report compiled from the new schedules which were put into force on July 1, 1906.

I have the honour to be, sir,

Your obedient servant,

M. J. BUTLER,

Deputy Minister of Railways and Canals.

OFFICE OF THE COMPTROLLER OF STATISTICS,

OTTAWA, November 5, 1909.

M. J. BUTLER, Esq., C.M.G.,
Deputy Minister of Railways and Canals.

Sir,—I have the honour to submit herewith the return of Railway Statistics for the year ended June 30, 1909.

As you are aware, a new system of railway accounting was introduced in 1907. The method and forms which had previously obtained were in that year discarded. They had become obsolete. In their place was substituted the schedules and classifications upon which the subjoined statistics are based.

The advantages of the present plan are obvious. Under the system in force from 1875 to 1907 reporting railways were permitted to classify their accounts as they thought best, and the result was an utter absence of uniformity. Not only were comparisons made impracticable as between railways, but the figures relating to Canada could not safely be compared with those of any other country. This was a serious drawback. Under the new order all railways are required to keep their accounts in accordance with prescribed classifications, and it happens that these definitions are identical with those in use throughout the United States. Thus, not only may sound comparisons be made as between railways in the Dominion, but also as between the results of railway operation in Canada and the United States. Other countries have not yet made the same degree of progress with respect to railway statistics; but a steady approach toward uniformity is taking place in at least Europe and Australia.

During the year 1909 several changes of more or less importance were deemed expedient in the classifications, chiefly with respect to operating expenses. The application of these did not, however, cause serious inconvenience. Nearly all the larger railways in Canada have lines extending into the United States, and upwards of twenty American railways are operated in the Dominion. For this reason, apart from the merits of the changes in themselves, it is at all times desirable that the basis of reporting should be the same on both sides of the boundary. At the present time the forms and classifications operative in Canada are precisely like those of the Interstate Commerce Commission at Washington, with but one relatively important exception. It has not been deemed proper on this side of the line to make a reduction from operating expenses on account of depreciation.

The railways did not all observe the time limit. That limit had been placed at 31st August, so as to have Railway Statistics completed as soon as possible after the annual assembling of Parliament. The returns, however, reached Ottawa earlier than in any preceding year, and this co-operative attitude of the railways has been a distinct help in the laborious process of tabulation. While there was not a single delinquent, it is deeply regretted that the returns of the Schomberg and Aurora Railway Company and the Kettle River Valley Railway Company were so meagre as to be of no practical value. In the latter case an incompetent accountant, who was dismissed later in the year, left a defective and useless record of operations for nine months of his tenure in office. In the former case, it would seem that the available statistics kept by the Company had reference to not more than a few elementary items.

The derelictions of the reporting railways to which allusion has just been made, joined to the trying and indefensible delays caused by a few others, suggest the imperative need of imposing in future the penalty provided in the Railway Act.

You will observe with satisfaction the expansion and betterment in statistical data made possible by the system which has been in effect for the past three years. In 1907

the foundation may be said to have been laid; in 1908 a commencement was made on the superstructure; this year the new edifice will be seen to be taking definite shape. Analytical comparisons are now possible which in the past could not even have been attempted. The scope of inquiry has also been widened. For example, in this report will be found information with respect to employees, highway crossings and accidents at highway crossings, which had not previously been available.

MILEAGE.

The mileage of railways in actual operation increased 1,138 during the year 1909, as compared with 514 miles in 1908. This does not include the trackage of the new transcontinental railway, of which 675 was open for traffic during the year, although officially returned as being still under construction. It is not possible to say how many miles of line were "under construction" in the Dominion on 30th June last. The term is wholly relative. From information received, however, it is estimated that at least 3,300 miles were in process of being built on the date indicated.

Following is the history of railway mileage in Canada since 1835:—

Year.	Miles in operation.	Year.	Miles in operation.
1835	0	1872	2,899
1836	16	1873	3,832
1837	16	1874	4,331
1838	16	1875	4,804
1839	16	1876	5,218
1840	16	1877	5,782
1841	16	1878	6,226
1842	16	1879	6,858
1843	16	1880	7,194
1844	16	1881	7,331
1845	16	1882	8,697
1846	16	1883	9,577
1847	54	1884	10,273
1848	54	1885	10,773
1849	54	1886	11,793
1850	66	1887	12,184
1851	159	1888	12,585
1852	205	1889	12,585
1853	506	1890	13,151
1854	764	1891	13,838
1855	877	1892	14,564
1856	1,414	1893	15,005
1857	1,444	1894	15,627
1858	1,863	1895	15,977
1859	1,994	1896	16,270
1860	2,065	1897	16,550
1861	2,146	1898	16,870
1862	2,189	1899	17,250
1863	2,189	1900	17,657
1864	2,189	1901	18,140
1865	2,240	1902	18,714
1866	2,278	1903	18,988
1867	2,278	1904	19,431
1868	2,270	1905	20,487
1869	2,524	1906	21,353
1870	2,617	1907	22,452
1871	2,695	1908	22,966
		1909	24,104

The distribution of railway mileage, with the increase for the year, by provinces, is as follows:—

		Increase.
Ontario	8,229·11	296·21
Quebec	3,662·94	89·29
Manitoba	3,205·30	94·39
Saskatchewan	2,631·34	550·04
Alberta	1,321·52	.....
British Columbia	1,795·94	63·11
New Brunswick	1,547·25	37·89
Nova Scotia	1,350·53	6·48
Prince Edward Island	269·33	1·83
Yukon	90·91	.....

It may be explained that in the province of Alberta considerable railway building has been in progress during the past two years, but it was all returned as being still under construction on June 30.

Of cognate importance is the increase in second track and yard and siding trackage. The facts are as follow:—

	1908.	1909.	Increase. miles.
Second track	1,211	1,464	253
Yard and siding tracks	4,546	4,761	215

This growth of second track and yard and siding track has a direct bearing on transportation facilities. Adding together the first, second and yard and siding tracks a total of 30,330 miles is obtained. With the exception of less than 100 miles all tracks in the Dominion are laid with steel rails.

It is instructive to compare the railway mileage of Canada with that of other countries. Following are the figures:—

Countries.	Miles.	Miles of line per 100 sq. miles.	Inhabitants per mile of line.
United States	229,300	6·4	365
Germany	35,652	17·1	1,587
Austro-Hungary	25,618	9·8	1,854
Great Britain and Ireland	23,063	19·0	1,912
France	29,293	14·2	1,333
Russia	35,214	1·8	2,941
Italy	10,203	9·2	3,119
Belgium	4,657	40·9	1,428
Netherlands	2,214	15·0	2,703
Switzerland	2,698	16·9	1,234
Spain	9,103	4·7	1,960
Portugal	1,639	4·5	3,333
Denmark	2,134	14·3	1,149
Norway	1,584	1·3	1,408
Sweden	8,180	4·7	629
Roumania	1,995	3·2	2,941
Turkey	1,952	1·8	5,000
Mexico	13,053	1·6	1,123
Brazil	10,600	0·32	1,408
Argentine Republic	12,776	1·1	353
Japan	5,012	3·1	9,091
British India	28,982	1·4	10,000
New Zealand	2,519	2·4	330
Victoria	3,428	3·9	350
New South Wales	3,472	1·1	440
Canada	24,104	0·6	300

The above statistics, which in each case are the latest available, show that the Dominion of Canada has the largest railway mileage in proportion to population of any country in the world, while in relation to area it has the smallest.

RAILWAY CAPITAL.

During the year $69,186,403 was added to the total capital liability of railways in Canada. An analysis of this account will be found in Table No. 4. The facts, summarized, are as follow:—

	1908.	1909.	Increase.
	$	$	$
Stocks	607,425,349	647,534,647	40,109,298
Funded debt	631,869,664	660,946,769	29,077,105
Total	1,239,295,013	1,308,481,416	69,186,403

The capital obligation arising out of these stock and bond issues amounts to $54,285 per mile of line. But that result is quite misleading, since, before such a calculation can properly be made, certain facts have to be taken into account. For example, the above total of $1,308,481,416 includes the stock and bond liability of the Grand Trunk Pacific, while the mileage of that line is not embraced in the total of 24,104 miles forming the divisor. On the other hand, the mileage of government owned lines in Canada forms a part of the 24,104, against which there is not any issue of either stock or bonds. Therefore, in dealing primarily with corporation railways the capital liability of the Grand Trunk Pacific must be eliminated, along with the mileage of government owned lines. This process reduces the money side of the equation to $1,222,089,976 and the mileage to 21,965. On this basis the result is $55,638. which correctly represents the stock and bond liability of Canadian corporate railways per mile. In analytical form the capital obligation may be set down as follows:—

Per mile—stocks	$28,345
" " —bonds	27,293
Total	$55,638

The funded debt of corporate railways was, on 30th June last, made up as follows:—

Bonds	$ 633,155,474
Miscellaneous obligations	8,436,282
Income bonds	7,892,882
Equipment trust obligations	11,462,131
Total	660,946,769

It should perhaps be mentioned that the Great Northern of the United States has constructed eight lines in the western provinces of Canada, aggregating 527 miles, in respect of which a capital liability of but $11,110,600 has thus far been returned. It is obvious that this situation has the effect of diluting the capital obligation per mile for the time being.

There remains the consideration of government owned and operated lines, as to which the mileage and capital cost up to 30th June last were:—

Railway.	Mileage.	Capital cost.	Cost per Mile.
		$	$
Intercolonial	1,447	88,006,989	60,820
Prince Edward Island	269	7,707,259	28,651
Temiskaming and Northern Ontario	265	13,867,015	52,329
New Brunswick Coal and Railway	58	1,964,640	33,873
Total	2,039	111,545,903	

Reference to the return earned by the railways of Canada upon capital will be found under the head of 'Earnings and Operating Expenses.'

It was announced in Railway Statistics for 1908 that an effort would be made during 1909 to revise the capital statement of Canadian railways. Serious obstacles were interposed, however, and it was not found practicable to complete the task. The inquiry was carried to the point of establishing a basis for the reporting of capital liability in 1910, and it is confidently expected the revision will then be brought to a satisfactory issue.

The object of this revision will be to eliminate dead and duplicate liability, of which the aggregate is very considerable—probably exceeding $200,000,000. The striking out of this relatively large sum will not involve any reflection upon the corporations to be affected thereby. These railways have simply been making their returns in the form prescribed by the department, and the inaccuracy which has arisen has been due to the system rather than to any intention to misrepresent. In part it came about from ignorance of the facts at this end.

A concrete illustration will make the matter clear. The Canadian Pacific took over some years ago the Columbia & Western, attached to which was a stock and bond liability, as per Table 4 of the annexed report, of $6,691,000. The certificates were acquired by the Canadian Pacific and placed in the vault of that company. To pay for them the purchasing corporation issued Canadian Pacific stock and bonds. It is of no consequence what was the amount of that issue. The fact of importance to bear in mind is that the stock and bond issue of the Columbia & Western lying in the vault of the Canadian Pacific cannot properly be regarded as being alive. The liability which actually exists is involved in the stock and bonds which the Canadian Pacific issued to acquire the stock and bonds of the Columbia & Western, and it is obvious that the department in publishing the original capital obligation of the Columbia & Western, plus that of the Canadian Pacific, has swollen the account to the exact extent of the duplication.

The effect of publishing, year after year, this practically extinct liability would be to mislead any one who might turn to Railway Statistics for accurate information with regard to the earning power of Canadian railways. That is to say, the return of interest, shown by dividing the aggregate capital into the net earnings, would be considerably smaller than it should be. It would be minimized to the precise extent of the inflation created by dead liability. This situation is not, however, peculiar to Canada. It exists in all countries where the controlling interest in lines has changed hands, or where the transfer of operating rights has taken place in any considerable degree. In the United States, for example, the same process of elimination which it is proposed shall be applied next year to Canadian railways is now going on. In both instances the end in view is to present the actual facts with respect to live railway obligations.

AID TO RAILWAYS.

The subsidies paid to railways during the year 1909 amounted to $3,291,601, made up as follows:—

By the Dominion	$2,500,612
By the provinces	397,111
By municipalities	393,878
Total	$3,291,601

Following is a statement of aid to railways since 1876:—

Year.	Dominion.	Provinces.	Municipalities.
	$ cts.	$ cts.	$ cts.
1876	*18,564,352 37	4,203,240 43	5,426,505 70
1877	16,235,185 33	4,338,498 02	5,689,299 31
1878	26,438,914 96	14,292,002 29	7,224,578 63
1879	26,438,914 96	14,593,001 91	7,450,978 63
1880	32,761,920 65	17,639,206 60	8,313,944 63
1881	37,629,207 33	a16,676,266 29	7,494,944 63
1882	37,731,208 33	17,044,628 91	8,809,944 63
1883	49,548,639 93	18,342,102 80	9,162,552 94
1884	†78,123,918 18	19,836,055 93	9,934,556 94
1885	92,762,967 17	19,137,719 93	12,472,450 43
1886	87,426,814 52	19,338,679 93	12,599,292 43
1887	91,228,674 03	21,204,993 01	12,812,836 43
1888	c90,644,574 40	23,342,758 82	13,144,224 43
1889	91,888,491 21	24,036,306 80	13,461,224 43
1890	93,889,277 76	25,086,285 41	13,709,624 43
1891	96,529,524 07	25,731 965 43	13,817,509 43
1892	97,601,639 53	26,997,435 78	13,981,247 99
1893	100,422,165 09	28,229,355 49	14,017,956 99
1894	102,087,290 06	29,368,697 75	14,178,610 99
1895	‡103,451,148 93	29,727,512 63	14,180,686 99
1896	101,961,763 91	30,055,946 30	14,494,756 99
1897	102,458,434 71	31,171,346 65	15,520,867 99
1898	103,878,261 66	31,495,555 48	15,660,667 99
1899	107,030,639 24	31,656,725 57	17,740,668 59
1900	107,760,795 70	31,310,170 06	15,884,542 16
1901	110,225,503 43	32,395,522 67	16,310,253 16
1902	112,324,091 13	33,145,320 84	16,465,604 03
1903	113,791,113 47	32,809,728 41	16,551,044 06
1904	115,875,668 31	34,496,917 84	17,157,810 19
1905	117,145,511 67	40,415,630 27	17,198,211 48
1906	118,474,316 04	43,278,022 12	17,125,163 98
1907	128,827,648 77	b35,123 130 80	17,346,633 34
1908	133,049,376 07	35,191,414 80	17,430,945 04
1909	135,549,987 71	35,588,526 15	17,824,823 60

*Included loan $2,311,666.67 to Northern Railway; not reported after this year.
†Included loan $29,880,912. to C. P. Railway; not reported later.
cEastern Extension $1,284,495.76 now included in I. C. Railway.
‡Incorrect total of $2,394,000 shown to the North Shore Railway.
aDecrease of $1,044,000 by N. B. Goverment to St. John and Maine Railway.
bThis amount does not include the cost of the Temiscaming and Northern Ontario Railway ($10,570,549) as formerly.

The following statement shows the amounts contributed by the various provinces:—

Year.	PROVINCES.						
	Ontario.	Quebec.	Nova Scotia.	New Brunswick.	British Columbia.	Manitoba.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1875	.....	.....	.....	.....	.....	.....	.....
1876	1,884,719 43	228,521 00	.....	2,090,000 00	.....	.....	4,203,240 43
1877	1,838,677 02	336,821 00	.....	2,163,000 00	.....	.....	4,338,498 02
1878	2,229,639 02	1,192,013 27	818,750 00	2,730,000 00	.....	.....	6,970,402 29
1879	2,549,639 02	1,192,013 27	818,750 00	2,730,000 00	.....	.....	7,290,402 29
1880	2,982,037 02	1,415,493 27	818,750 00	2,754,000 00	.....	.....	7,970,280 29
1881	3,183,037 02	1,578,443 27	823,330 00	2,754,000 00	.....	.....	8,338,810 29
1882	3,702,537 02	1,600,992 27	823,330 00	2,763,665 00	.....	.....	8,890,524 29
1883	3,792,611 69	2,116,540 11	823,330 00	2,763,665 00	.....	.....	9,496,146 80
1884	4,012,908 02	2,186,125 91	1,578,601 00	3,180,465 00	.....	.....	10,958,099 93
1885	4,504,984 52	2,428,239 41	1,628,601 00	3,466,165 00	.....	.....	12,027,989 93
1886	5,983,985 52	2,705,714 41	1,628,601 00	3,475,165 00	.....	386,250 00	14,179,715 93
1887	5,984,007 52	3,276,071 81	1,653,902 68	3,865,165 00	.....	1,895,000 00	16,674,147 01
1888	5,984,007 52	4,708,319 41	1,654,776 13	4,243,098 89	37,500 00	1,945,000 00	18,572,701 95
1889	5,984,007 52	4,784,105 41	1,913,495 09	4,261,245 10	37,500 00	1,981,000 00	18,961,353 12
1890	6,014,015 52	5,166,365 33	1,952,195 87	4,280,965 84	37,500 00	2,380,690 00	19,831,732 56
1891	6,069,565 12	6,237,866 03	2,005,865 87	4,311,385 18	37,500 00	2,390,690 00	21,052,872 20
1892	6,171,181 44	7,583,060 76	2,099,404 77	4,365,355 71	37,500 00	2,390,690 00	22,647,192 68
1893	6,391,932 74	7,864,561 83	2,121,944 55	4,425,281 81	37,500 00	2,623,286 77	23,464,507 70
1894	6,402,738 24	9,345,115 38	2,125,344 55	4,432,481 81	37,500 00	2,625,561 77	24,968,741 75
1895	6,747,685 24	9,984,348 09	2,158,847 10	4,453,800 00	37,500 00	2,625,561 77	26,007,742 20
1896	6,932,388 24	10,072,942 06	2,208,847 10	4,455,780 00	37,500 00	2,625,561 77	26,333,019 17
1897	7,119,065 63	10,859,484 01	2,258,847 10	4,462,670 71	37,500 00	2,625,561 77	27,363,129 22
1898	7,200,003 59	11,100,334 88	2,304,847 10	4,499,010 71	37,500 00	2,625,561 77	27,767,258 05
1899	7,281,129 63	11,206,833 10	2,304,847 10	4,506,040 71	37,500 00	2,703,061 77	28,039,412 31
1900	7,406,992 59	11,217,864 63	2,304,847 10	4,529,040 71	37,500 00	2,789,061 77	28,285,306 80
1901	7,819,928 65	11,590,489 84	2,522,847 10	4,529,040 71	37,500 00	2,796,837 02	29,296,643 32
1902	8,392,817 69	11,995,282 16	2,582,847 10	4,542,939 71	37,500 00	2,796,888 02	30,348,274 68
1903	8,418,577 69	11,995,285 66	2,811,829 92	4,542,939 71	37,500 00	2,864,061 77	30,670,194 75
1904	8,512,578 04	12,163,285 66	3,568,445 35	4,569,937 71	37,500 00	2,872,887 02	31,724,633 78
1905	8,562,504 47	12,259,285 66	3,991,192 75	4,580,934 71	37,500 00	2,872,887 02	32,304,304 61
1906	8,737,722 41	12,304,470 16	4,425,267 20	4,585,537 71	121,135 00	2,872,887 02	33,047,019 50
1907	8,739,796 04	12,304,470 16	6,274,498 20	4,616,237 71	127,135 00	2,872,887 02	34,935,024 13
1908	8,783,296 04	12,304,470 16	6,324,400 75	4,707,486 71	780,209 00	2,872,887 02	35,772,749 68
1909	9,038,296 03	12,328,196 52	6,336,788 75	4,807,486 71	786,209 00	2,878,887 02	36,169,864 03

The contributions of municipalities, by provinces, have been as follow:—

Year.	Ontario.	Quebec.	Nova Scotia.	New Brunswick.	British Columbia.	Manitoba.	Northwest Territories.	Total.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1875	3,774,620 13	513,000 00	.....	127,500 00	.....	.....	.....	4,415,120 13
1876	4,660,505 70	513,000 00	.....	210,500 00	.....	.....	.....	5,384,005 70
1877	4,748,299 31	635,000 00	.....	223,500 00	.....	.....	.....	5,606,799 31
1878	5,085,434 01	1,323,144 62	175,000 00	293,500 00	.....	.....	.....	6,877,078 63
1879	5,407,934 01	1,532,044 62	175,000 00	293,500 00	.....	.....	.....	7,408,478 63
1880	5,988,300 01	1,854,144 62	175,000 00	293,500 00	.....	.....	.....	8,310,944 63
1881	5,988,300 01	1,864,144 62	250,000 00	293,500 00	.....	.....	.....	8,395,944 63
1882	6,673,300 01	1,864,144 62	250,000 00	293,500 00	.....	.....	.....	9,080,944 63
1883	6,948,411 32	2,125,144 62	250,000 00	293,500 00	.....	.....	.....	9,617,055 94
1884	7,178,411 32	2,150,144 62	250,000 00	296,500 00	.....	.....	.....	9,875,055 94
1885	8,027,805 81	2,195,144 62	250,000 00	296,500 00	.....	265,000 00	.....	11,034,450 43
1886	8,027,805 81	2,255,986 62	250,000 00	296,500 00	.....	480,600 00	.....	11,310,892 43
1887	8,055,305 81	2,380,986 62	250,000 00	296,500 00	37,500 00	480,600 00	.....	11,500,892 43
1888	8,055,305 81	2,495,144 62	250,000 00	296,500 00	37,500 00	490,600 00	.....	11,625,050 43
1889	8,055,305 81	2,569,818 62	250,000 00	296,500 00	37,500 00	490,600 00	.....	11,699,724 43
1890	8,085,305 81	2,626,318 62	250,000 00	296,500 00	37,500 00	490,600 00	.....	11,786,224 43
1891	8,120,305 81	2,644,418 62	277,685 00	336,500 00	37,500 00	490,600 00	.....	11,907,009 43
1892	10,261,244 37	2,735,714 62	277,685 00	336,500 00	37,500 00	490,600 00	.....	14,139,243 99
1893	10,289,453 37	2,840,718 62	277,685 00	336,500 00	37,500 00	490,600 00	.....	14,272,456 99
1894	10,391,607 37	2,840,718 62	277,685 00	336,500 00	37,500 00	490,600 00	.....	14,374,610 99
1895	10,393,683 37	2,840,718 62	277,685 00	336,500 00	37,500 00	490,600 00	.....	14,376,686 99
1896	10,480,753 37	2,840,718 62	277,685 00	336,500 00	37,500 00	490,600 00	.....	14,463,756 99
1897	11,890,364 37	2,865,718 62	281,685 00	336,500 00	37,500 00	490,600 00	.....	15,902,367 99
1898	11,916,164 37	2,865,718 62	281,685 00	336,500 00	37,500 00	490,600 00	.....	15,928 167,99
1899	11,971,164 37	2,865,718 62	281,685 00	336,500 00	37,500 00	490,600 00	22,261 29	16,005,429 28
1900	12,050,164 37	2,865,718 62	370,559 17	336,500 00	37,500 00	490,600 00	22,261 29	16,173,303 45
1901	12,102,164 37	2,942,929 62	370,559 17	336,500 00	37,500 00	490,600 00	22,261 29	16,302,514 45
1902	12,163,164 37	3,118,519 20	370,559 17	336,500 00	37,500 00	490,600 00	22,261 29	16,539,104 03
1903	12,189,104 80	3,118,519 20	456,559 17	336,500 00	37,500 00	490,600 00	22,261 29	16,651 044 46
1904	12,862,147 80	3,125,727 17	471,898 10	336,500 00	37,500 00	490,600 00	22,261 29	17,346,634 36
1905	12,930,290 18	3,126,036 08	471,898 10	341,500 00	37,500 00	490,600 00	22,261 29	17,420,085 65
1906	12,961,290 18	3,126,036 08	471,898 10	341,500 00	162,952 50	490,600 00	22,261 29	17,576,538 15
1907	12,966,197 80	3,127,536 08	481,898 10	341,500 00	171,952 50	490,600 00	22,261 29	17,601,945 77
1908	12,983,079 24	3,137,536 08	481,898 10	341,500 00	180,952 50	490,600 00	22,261 29	17,637,827 21
1909	13,161,075 63	3,137,536 08	481,898 10	341,500 00	189,952 50	490,600 00	22,261 29	17,824,823 60

It will be observed that the totals in the foregoing analyses of aid given by the provinces and municipalities do not absolutely agree with those in the initial table on a preceding page. This result was quite unavoidable. In the years prior to 1906 the railways were not given very definite instructions with respect to the preparation of their statistical returns. In this lack of system it is not surprising that there should have been a good deal of carelessness shown by reporting roads. The supervision at this end was lax at times. Changes of ownership and the destruction of records by fire have made it impracticable to locate the errors which have thus crept into the figures as given above. They are not, however, relatively large or serious.

An analysis of the financial aid given to railways discloses the following facts:—

DOMINION.

Cash subsidies	$77,028,080 58
Loans	15,576,533 33
Paid to Quebec Government	5,160,053 83
Cost of lines handed over to C. P. R.	37,785,319 97
Total	$135,549,987 71

PROVINCES.

Cash subsidies	$32,538,496 15
Loans	2,750,030 00
Subscriptions to shares	300,000 00
Total	$35,588,526 15

MUNICIPALITIES.

Cash subsidies	$12,580,824 98
Loans	2,404,498 62
Subscriptions to shares	2,839,500 00
Total	$17,824,823 60

It would be misleading to assume that the above statements represent all that has been done by the Dominion and the several provinces in aid of railway construction. The Dominion, for example, is building the eastern section of the Transcontinental Railway between Moncton and Winnipeg, the western division of which is known as the Grand Trunk Pacific, on which the expenditure up to June 30 was $33,301,342.15.

The guarantees are also substantial, as the following statements will show:—

DOMINION.

1. The Canadian Northern Railway, Cap. 7, 3 Edward VII (1903). The guarantee is for the principal, £1,923,287 sterling, and interest thereon at the rate of 3 per cent per annum for fifty years.

2. The Canadian Northern Railway Company, Cap. 2, 7 and 8 Edward VII (1908). The guarantee is for the principal of £1,622,586 19s. 9d. sterling debenture stock and interest thereon at the rate of 3½ per cent per annum for fifty years from 20th July, 1908: interest payable half-yearly; date of guarantee, 21st October, 1908.

3. The Grand Trunk Pacific Railway Company, Cap. 24, 4 Edward VII (1904). The guarantee is for a sum equal to 75 per cent of the cost of construction of the Western Division of the National Transcontinental Railway, but not exceeding $13,000 per mile in respect of the prairie section of the said railway. The amount of bonds issued and guaranteed is £5,200,000, of which £3,200,000 was issued in September, 1905, and the balance in October, 1909.

ONTARIO.

Canadian Northern.—Guarantee of interest on bonds representing $7,860,000.

QUEBEC.

Guarantee of bonds of the Montreal and Western to the extent of $812,000.

NEW BRUNSWICK.

Interest on the bonds of the New Brunswick Coal and Railway, amounting to $700,000, is guaranteed.

NOVA SCOTIA.

Halifax and South Western.—A loan of $13,500 per mile, which, on a total of 372 miles, would amount to $5,022,000, secured by mortgage, with the right to take over and sell or operate the property in case default is made in the terms of the covenant.

MANITOBA.

Canadian Northern.—Main line and branches, $11,854,287; Winnipeg terminals and union station, $3,000,000; Ontario division from Rainy River to Fort William, $5,745,587.

BRITISH COLUMBIA.

Shuswap and Okanagan.—Guarantee of interest on $1,249,760 for 25 years at 4 per cent.

Victoria and Sidney.—Guarantee of interest on $300,000 for 25 years at 2 per cent.

Nakusp and Slocan.—Guarantee of principal and interest on bonds aggregating $647,072 for 25 years at 4 per cent.

ALBERTA.

Canadian Northern. Interest on bonds, amounting to $3,640,000, guaranteed.

SASKATCHEWAN.

The guarantees of this province are for $13,000 per mile to the following lines of railway:—

Grand Trunk Pacific Railway.—A line from a point on the western division of the Grand Trunk Pacific Railway in the vicinity of township 22, range 6, west second meridian to Yorkton, a distance of about 40 miles.

Grand Trunk Pacific Railway.—A line from a point on the western division of the Grand Trunk Pacific Railway between the 108th and 109th degrees of longitude to Battleford, a distance of about 49 miles.

Grand Trunk Pacific Railway.—A line from a point on the western division of the Grand Trunk Pacific Railway in the vicinity of township 22, range 6, west second meridian to Regina, a distance of about 110 miles.

Canadian Northern Railway.—A line from a point on the Canadian Northern Railway in or near Maryfield, thence in a generally south-westerly and westerly direction to or near range 17, west second meridian, a distance of about 135 miles.

Canadian Northern Railway.—A line from a point on the main line of the Canadian Northern Railway in or near Dalmeny, thence in a generally northerly and north-easterly direction for a distance of 40 miles or thereabouts.

Canadian Northern Railway.—A line from a point on the Canadian Northern Railway in or near North Battleford, thence in a generally northwesterly direction for a distance of 50 miles or thereabouts.

The amount involved in the foregoing guarantees is $5,512,000.

LAND GRANTS.

The land subsidies granted by the Dominion, and earned up to June 30, were as follow:—

	Acres.
Alberta Railway and Irrigation Co. (formerly Northwest Coal and Navigation Co.	1,114,368
Calgary and Edmonton Railway Co	1,888,448
Canadian Northern Railway Co. (from point on C. P. R. to Hudson Bay), Canadian Northern Railway Co. (formerly Lake Manitoba and Canal Co.)	3,422,528
Canadian Pacific Railway Co. (main line)	18,206,986
C. P. R. Pipestone Extension, Souris Branch	200,320
C. P. R., Souris Branch	1,408,704
Great Northwest Central Railway Co. (formerly Northwest Central Railway Co.)	320,000
Manitoba and Northwestern Railway Co	1,501,376
Manitoba Southwestern Colonization Railway	1,396,800
Manitoba and Southeastern Railway Co	680,320
Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Co	1,625,344
Saskatchewan and Western Railway Co	98,880
Total	31,864,074

Some of the provinces have also given land grants. A statement of Dominion and provincial aid of that character gives the following result:—

	Acres.
By the Dominion	31,864,074
By the Province of Quebec	13,324,950
By the Province of British Columbia	8,119,221
By the Province of New Brunswick	1,647,772
By the Province of Nova Scotia	160,000
Total	55,116,017

PUBLIC SERVICE OF RAILWAYS.

The railways of Canada carried 32,683,309 passengers and 66,842,258 tons of freight in 1909, a decrease of 1,361,683 in the number of passengers, and an increase of 3,771,091 in the freight tonnage, as compared with 1908.

In only four preceding years since 1875 did a decline in passenger traffic occur—1880, 1885, 1895 and 1901.

Following is a statement of passenger and freight traffic for the past 35 years:—

Year.	Passengers carried.	Tons of Freight, 2,000 lbs.	Year.	Passengers carried.	Tons of Freight, 2,000 lbs.
1875	5,190,416	5,670,837	1892	13,533,414	22,189,923
1876	5,544,814	6,331,757	1893	13,618,027	22,003,599
1877	6,073,233	6,859,796	1894	14,462,498	20,721,116
1878	6,443,924	7,883,472	1895	13,987,580	21,524,421
1879	6,523,816	8,348,810	1896	14,810,407	24,266,825
1880	6,462,948	9,938,858	1897	16,171,338	25,300,331
1881	6,943,671	12,065,323	1898	18,444,049	28,785,903
1882	9,352,335	13,575,787	1899	19,133,365	31,211,753
1883	9,579,984	13,266,255	1900	21,500,175	35,946,183
1884	9,982,358	13,712,269	1901	18,385,722	36,999,371
1885	9,672,599	14,659,271	1902	20,679,974	42,376,527
1886	9,861,024	15,670,460	1903	22,148,742	47,373,417
1887	10,698,638	16,356,335	1904	23,640,765	48,097,519
1888	11,416,791	17,172,759	1905	25,288,723	50,893,957
1889	12,151,105	17,928,626	1906	27,989,782	57,966,713
1890	12,821,262	20,787,469	1907	32,137,319	63,866,135
1891	13,222,568	21,753,021	1908	34,044,992	63,071,167
			1909	32,683,309	66,842,258

PASSENGER TRAFFIC.

The number of passengers carried one mile was 2,033,001,225, as compared with 2,081,960,864 in 1908—a decrease for the year of 48,959,639.

The number of passengers carried one mile per mile of road was 84,342. This was an actual decrease in the density of passenger traffic of 6,312, as compared with the preceding year.

There was also a decrease in the passengers carried per mile of line. The number in 1909 was 1,355, as compared with 1,482 in 1908—a falling off to the extent of 127.

The average receipts per passenger per mile were 1.921 cents, or within .001 of the rate established by the figures for 1908.

The total passenger revenue for 1909 was $39,073,488.84. This may be strictly regarded as the aggregate of ticket sales. The earnings from passenger service, which include the receipts from mails and express, baggage, &c., amounted to $45,282,326.27. An analysis of these accounts will be found in Table No. 7.

The mileage of revenue passenger trains was 32,295,730, and of mixed trains 7,061,580—an increase of 345,381 in the former and 850,773 in the latter. These facts make it obvious that, while there was a decline in the number of passengers carried and in the revenue from ticket sales, the train service provided by the railways of the Dominion was actually increased.

The average number of passengers in each train was 51, a decline of 3 as compared with 1908.

The average passenger journey was 62 miles, or one mile more than for the preceding year.

The sum of the foregoing fact is, that, while the railways had an increased passenger train mileage in 1909 over 1908, they carried fewer passengers, in the aggregate, fewer passengers per train, and earned less money from ticket sales. Taking into account the total earnings from the running of passenger trains—that is, from ticket sales, mails and express, baggage, &c.—which amounted to $45,282,326.27 in 1909 as compared with $46,854,158.97 in 1908, there was a decrease in the gross earnings per passenger train mile of .077 cent. The figures in that regard are as follow:—

Earnings per passenger train mile, 1908	$1·227
" " 1909	1·150
Decrease	·077

In other words, if the earning power per passenger train mile in 1909 had been equal to the rate in 1908 the railways would have had an increase of $3,031,612 in the aggregate revenue from passenger service. The revenue per passenger in 1909 was, however, $1·195 as against $1·174 in 1908.

Summarizing the data in relation to passenger traffic the results for three years are as follow:—

——	1907.	1908.	1909.
Miles of railway	22,452	22,966	24,104
Number of passengers	32,137,319	34,044,992	32,683,309
Passengers carried one mile	2,049,549,813	2,081,960,864	2,033,001,225
Passengers carried one mile per mile of line	90,921	90,654	84,342
Passengers carried per mile of line	1,431	1,482	1,335
Average passenger journey (miles)	64	61	62
Average number of passengers per train	56	54	51
Passenger train mileage	30,220,461	31,950,349	32,295,730
Mixed train mileage	5,971,414	6,210,807	7,061,580
Earnings from ticket sales	$39,184,437	$39,992,503	$39,073,488
Earnings from passenger service	$45,730,652	$46,854,158	$45,282,326
Average receipts per passenger	$1·219	$1·174	$1·195
Average receipts per passenger per mile (cents)	1·911	1·920	1·921

FREIGHT TRAFFIC.

The carrying of 66,842,258 tons of freight in 1909 represented an increase of 3,771,091 tons over 1908; or 5·9 per cent.

The number of tons hauled one mile was 13,160,567,550, as against 12,961,512,519 in 1908—an increase of 199,055,031.

The number of tons hauled one mile per mile of line, representing the density of freight traffic, was 545,991, which, owing to an increase of 1,138 in mileage during the year without a corresponding development of new business, was a decrease of 18,383 as compared with 1908.

The average receipts per ton per mile, which may be taken as the statistical freight rate for all the railways of the Dominion in common, was ·727 cent—a gain of .004 on the rate for 1908.

The revenue from freight was $95,714,783.41, as against $93,746,655.45 in 1908, showing a gain of $1,968,127.96.

The mileage of revenue freight trains was 40,304,900, as against 40,476,370 the preceding year—a reduction of 171,470. The mixed train mileage was 7,061,580.

The mileage of loaded freight cars was 775,543,414, and of empty freight cars 281,175,615. These figures represent an expansion of 26,618,594 in loaded freight car mileage over 1908, and a shrinkage of 3,768,914 in the mileage of empty freight cars. The mileage of caboose cars, of which a record was not taken in previous years, was 37,644,038. Adding together the car mileage of all classes a total of 1,094,363,067 is had.

The average haul of freight in 1909 was 197 miles, as against 206 miles in 1908.

The average number of tons per freight train was 278, or precisely the same figure as in 1908.

The average number of loaded cars per freight train was 16·37, as compared with 16·04 in the year preceding.

The average number of tons per loaded freight car was 16·98. In 1908 the average load per car was 17·33; so that there was a falling off for the year 1909 of ·35 ton.

The conclusions to be drawn from the facts disclosed in the four preceding paragraphs are, that, as compared with 1908, there was in 1909 a shortening of the haul by 9 miles, coupled with a slight reduction in the average load per car, which conditions, however, were met by a corresponding increase in the average number of loaded cars per train; so that the average train load remained unaltered.

For convenience to the eye, the statistical facts given above are placed in tabular form as follows:—

——	1907.	1908.	1909.
Tons hauled	63,866,135	63,071,167	66,842,258
Tons hauled one mile	11,687,711,830	12,961,512,519	13,160,567,550
Tons hauled one mile per mile of line	518,486	564,378	545,991
Average haul, miles	183	206	197
Freight train mileage	38,923,890	40,476,370	40,304,906
Mixed train mileage	5,971,414	6,210,807	7,061,580
Revenue from freight	$94,995,087	$93,746,655	$95,714,783
Average tons per train	260	278	278
Average cars per train	16·92	16·04	16·37
Average tons per car	15·37	17·33	16·98
Average receipts per ton per mile, cent	·815	·723	·727

The commodities which entered into the freight business of the railways for 1907, 1908 and 1909 were as follow:—

——	1907.	1908.	1909.
	Tons.	Tons.	Tons.
Products of agriculture.—			
Grain	5,776,731	5,270,935	6,837,506
Flour	1,402,386	1,565,008	1,758,894
Other mill products	654,179	836,877	1,156,071
Hay	803,918	643,695	861,265
Tobacco	10,042	23,235	26,462
Cotton	22,164	70,203	122,300
Fruit and vegetables	562,716	803,777	845,930
Other products of agriculture	289,525	183,237	354,835
Products of animals—			
Live stock	1,118,141	1,156,772	1,206,221
Dressed meats	400,900	455,580	554,984
Other packing house products	463,647	444,841	436,529
Poultry game and fish	128,432	151,100	175,081
Wool	23,472	33,318	37,236
Hides and leather	154,157	141,341	202,968
Other products of animals	180,517	89,407	194,468
Products of mines—			
Anthracite coal	1,635,628	3,735,141	4,600,514
Bituminous coal	11,805,060	12,320,584	11,647,728
Coke	547,303	845,702	1,061,829
Ores	2,209,860	2,953,353	3,147,487
Stone, sand, &c	2,083,336	2,538,333	3,096,416
Other products of mines	178,985	243,054	377,087
Products of forest			
Lumber	7,542,475	10,317,541	7,759,393
Other products of forests	2,687,160	2,594,685	3,835,614
Manufactures—			
Petroleum and other oils	270,810	390,331	464,953
Sugar	232,620	451,641	701,319
Naval stores	1,674	3,742	22,509
Iron, pig and bloom	304,136	583,948	593,950
Iron and steel rails	190,380	628,988	446,678
Castings and machinery	231,159	858,914	897,849
Bar and sheet metal	87,958	353,802	337,866
Cement brick and lime	1,393,792	1,421,678	1,789,994
Agricultural implements	223,664	281,834	306,724
Wagons, carriages, tools, &c	42,129	96,197	119,463
Wines, liquors and beers	191,576	209,912	238,808
Household goods and furniture	256,208	269,299	301,401
Other manufactures	4,448,535	1,105,433	1,681,078
Merchandise	2,309,084	2,008,267	2,393,285
Miscellaneous	5,533,426	6,935,135	6,234,372

The above classified items aggregate 66,830,019 tons, which is within a few thousand tons of the gross tonnage for the year. Of that amount 36,075,101 tons originated on the reporting roads, and 30,754,918 tons were received from connecting lines.

Separated into classes the following totals are given:—

—	1907.	1908.	1909.
	Tons.	Tons.	Tons.
Products of agriculture	9,521,661	9,396,967	11,963,263
Products of animals	2,469,266	2,472,359	2,807,487
Products of mines	18,460,172	22,636,227	23,931,061
Products of forests	10,229,635	12,912,226	11,595,007
Manufactures	7,974,641	6,655,719	7,902,592
Merchandise	2,309,084	2,008,067	2,393,285
Miscellaneous	5,533,426	6,938,135	6,234,372
Totals	56,497,885	63,019,900	66,830,019

It is both interesting and instructive to observe the relationship which each of these classes bears to the whole volume of freight traffic. Expressed in percentages the facts are as follow:—

—	1907.	1908.	1909.
Products of agriculture	16·85	14·91	17·91
Products of animals	4·37	3·92	4·21
Products of mines	32·68	35·92	35·81
Products of forests	18·11	20·49	17·35
Manufactures	14·11	10·56	11·82
Merchandise	4·08	3·18	3·58
Miscellaneous	9·79	11·02	9·32

It will be seen that the first four classes, which might be regarded as commanding low rates, because transported in large bulk, made up 75.28 per cent of the total.

EARNINGS AND OPERATING EXPENSES.

The aggregate earnings of railways for the year 1909 were $145,056,336.19—a decrease of $1,861,977.42 as compared with 1908.

The operating expenses were $104,600,084.43, or $2,704,058.08 less than for the preceding year.

The following is a statement of earnings and operating expenses since 1875:—

Year.	Earnings.	Operating expenses.	Percentage of operating expenses to earnings.
	$	$	
1875	19,470,539	15,775,532	81·1
1876	19,358,084	15,802,721	81·8
1877	18,742,053	15,290,091	81·1
1878	20,520,078	16,100,102	78·4
1879	19,925,066	16,188,282	81·2
1880	23,561,447	16,840,705	71·0
1881	27,987,508	20,121,418	71·9
1882	29,027,789	22,390,708	77·1
1883	33,244,586	24,691,667	74·3
1884	33,421,705	25.595,341	76·5
1885	32,227,469	24,015,351	74·5
1886	33,389,381	24,117,582	72·4
1887	38,841,609	27,624,683	71·1
1888	42,159,152	30,652,046	72·7
1889	42,149,615	31,038,045	73·6
1890	46,843,826	32,913,350	70·2
1891	48,192,099	34,960,449	72·5
1892	51,685,768	36,488,228	70·5
1893	52,042,396	36,616,033	70·3
1894	49,552,528	35,218,432	71·7
1895	46,785,486	32,749,668	69·9
1896	50,545,569	35,042,654	69·3
1897	52,353,276	35,168,665	67·1
1898	59,715,105	39,137,549	65·5
1899	62,243,784	40,706,217	65·3
1900	70,740,270	47,699,798	67·4
1901	72,898,749	50,368,726	69·0
1902	83,666,503	57,343,592	68·3
1903	96,064,526	67,481,523	70·2
1904	100,219,436	74,563,161	74·4
1905	106,467,198	79,977,573	75·2
1906	125,322,865	87,129,434	69·5
1907	146,738,214	103,748,672	70·7
1908	146,918,314	107,304,143	73·0
1909	145,056,336	104,600,084	72·1

EARNINGS.

The net revenue for 1909 was $40,456,251.76, showing a betterment of $842,080.66 as against 1908.

Net earnings for 1909 were equal to $1,678.40 per mile of railway. This was $46.50 less than the result for 1908, showing that railway mileage had increased at a more rapid rate than had net earnings. In other words, the new mileage had not in 1909 attained to the normal earning power of the older mileage, and to that extent represented a diluting agency.

The net earnings of $40,456,251.76 represented 3·09 per cent on a capitalization of $1,308,481,416. If, however, the same net earnings are applied to the capital liability of the railways which created them, and account is not taken of the obligations of those corpor-

ations which failed to make ends meet, the return rises to 3·93 per cent. Thirty-six railways, out of a total of 87, had a deficit in 1909. In fact, the same 36 lines have for years been apparently operated at a loss—a condition which will be dealt with next year in connection with the revision of capital liability. An examination of the facts in relation to the railways which carried at least 70 per cent of the whole traffic of the Dominion in 1909 will show that, so far as those lines are concerned, a substantial return on investment was earned. The net earnings as above indicated represent the remainder after all deficits have been deducted, which, as has been said, involves a considerable dilution.

The gross revenue for 1909, considered in relation to its various sources, gives the following results:—

——	$ cts.	Per cent.
Passenger service	45,282,326 27	31·21
Freight service	96,685,076 23	66·65
Station and train privileges, &c	493,895 13	·35
Telegraphs, rents and other sources	2,595,038 56	1·79
Total	145,056,336 19	.....

The significance of the foregoing proportions will be better understood in the light of the relationship which earnings from freight and passenger services bear to total earnings in other countries. The following examples may be given:—

——	Freight.	Passengers.	All other.
United States	70·44	21·81	7·75
Great Britain	50·35	41·94	7·71
Germany	65·22	27·20	7·58
France	53·64	44·51	1·85
Switzerland	52·63	43·02	4·35
Canada	66·65	31·21	2·14

It is not practicable, owing to several changes in the method of accounting, to make a comparison with the corresponding items of revenue in preceding years. The following items, however, are comparable:—

——	1907.	1908.	1909.
	$ cts.	$ cts.	$ cts.
Passenger service	47,730.652 29	46,854,158 97	45,282,326 27
Freight service	94,995,087 81	93,746,655 45	96,685,076 23

Following is an analysis of the earnings from passenger service:—

——	1907.	1908.	1909.
	$ cts.	$ cts.	$ cts.
Passengers	39,184,437 64	39,992,503 11	39,073,488 84
Mails	1,626,704 64	1,670,120 90	1,723,180 97
Express	3,277,695 09	3,486,300 63	3,561,170 96
Other sources	1,641,814 92	1,705,234 33	924,485 50
Total	45,730,652 29	48,854,158 97	45,282,326 27

It will be observed, as has already been pointed out, that the receipts from passengers show a decline for the year. On the other hand, mails and express reveal an increase. The falling off in other sources of passenger revenue is in part accounted for by a change in the classification, which transferred some of the items to outside operations.

The gross earnings per mile of railway were $6,017.93 as compared with $6,397.21 in 1908.

The net earnings were $1,678.40 per mile of line, a decrease from the preceding year of $46.50.

The average revenue per passenger was $1.195, representing a gain of .020 over 1908.

The average receipts per ton of freight were $1.432, a falling off to the extent of .054 as against the preceding year.

The earnings per passenger train mile were $1.150. In 1908 the average was $1.228. The loss of .078 is accounted for by a decrease in the revenue from passenger train service, and an increase in the passenger train mileage.

The earnings per freight train mile were $2.041. For 1908 the figures were $2.008.

The earnings per train mile, for all trains, amounted to $1.816, as against $1.868 in 1908.

The earnings from all sources other than freight and passenger service were equal to 2.14 per cent of the whole. The proportion of freight, passenger and other earnings to total earnings was as follows:—

——	1907.	1908.	1909.
Freight service	64·73	63·81	66·65
Passenger service	31·16	31·89	31·21
All other	4·11	4·30	2·14

It is instructive to know that in the United States the ratio of freight earnings is higher than in Canada, while the passenger earnings are lower, the percentages being 70.44 and 21.81 respectively. On the other hand, in Great Britain passenger service represents 41.94 per cent of the whole, and freight service 50.35.

It is not practicable to carry the comparison of earning powers in Canada back beyond 1907, for the reason that a different classification of accounts prevailed prior to that year.

On the basis of accounting which was then in vogue the following table, having reference to the years from 1875 to 1906, has some measure of value:—

Year.	Passengers.	Per cent.	Freight.	Per cent.	Mail and Express.	Per cent.	Other Sources.	Per cent.	Total.
	$		$		$		$		$
1875...	6,410,934	32·92	12,073,570	62·00	693,250	3·56	292,784	1·52	19,470,539
1876...	6,254,866	32·25	12,211,158	63·08	703,994	3·63	188,064	0·96	19,358,084
1877...	6,458,493	34·46	11,351,264	60·40	744,741	3·97	217,554	1·16	18,742,053
1878...	6,386,325	31·12	13,129,191	63·98	795,797	3·87	208,763	1·01	20,520,078
1879...	6,459,598	32.41	12,509,093	62·77	789,926	3·96	166,448	0·83	19,925,066
1880...	7,076,339	30·03	15,506,935	65·81	851,288	3·18	102,075	0·43	23,561,447
1881...	8,223,254	29·34	18,666,982	66·69	946,159	3·37	145,332	0·51	27,987,508
1882...	10,018,477	34·51	17,729,945	61·07	1,037,460	3·57	235,857	0·81	29,027,789
1883...	10,538,119	31·69	21,320,208	64·13	1,108,208	3·33	261,423	0·78	33,244,586
1884...	11,204,036	33·70	20,763,243	62·12	1,155,044	3·45	299,880	0·89	33,421,705
1885...	10,559,796	32·76	19,962,058	61·94	1,283,307	3·98	422,306	1·31	32,227,469
1886...	10,261,691	30·73	21,183,967	63·44	1,432,360	4·02	511,362	1·53	33,389,381
1887...	11,867,597	30·55	24,581,047	63·28	1,575,157	4·05	771,992	1·98	38,841,609
1888...	12,744,636	30·22	26,410,084	62·62	1,627,731	3·85	1,376,699	3·26	42,159,152
1889...	13,242,708	31·41	26,671,049	63·27	1,681,162	3·98	554,694	1·29	42,149,615
1890...	13,731,768	29·31	29,921,788	63·87	1,757,977	3·96	1,423,592	3·25	46,843,826
1891...	14,286,408	29·64	30,548,645	63·38	1,904,961	3·95	1,452,083	3·01	48,192,099
1892...	14,788,465	28·61	33,230,121	64·28	1,995,059	3·85	1,672,121	3·23	51,685,768
1893...	15,087,299	29·12	32,935,028	63·28	2,151,769	4·13	1,868,298	3·59	52,042,396
1894...	15,452,420	31·18	29,982,482	60·50	2,182,942	4·40	1,934,682	3·94	49,552,528
1895...	13,311,440	28·42	29,545,490	63·15	2,198,460	4·43	1,730,096	3,68	46,785,486
1896...	13,747,773	27·19	32,368,082	64·03	2,396,082	4·07	2,033,069	4·02	50,545,569
1897...	13,929,346	26·48	33,522,102	62·88	2,624,573	5·01	2,278,106	4·35	52,353,276
1898...	15,622,311	26·16	38,508,175	64·48	2,732,004	4·59	2,852,613	4·77	59,715,105
1899...	15,929,583	25·59	40,101,036	64·42	2,842,681	4·56	3,370,483	5·41	62,243,784
1900...	18,581,452	26·26	45,643,699	64·52	3,012,486	4·25	3,502,632	4·95	70,740,270
1901...	19,396,302	26·60	46,665,103	64·01	3,105,457	4·25	3,731,885	5·12	72,898,749
1902...	22,600,090	27·01	53,986,672	64·52	3,273,302	3·91	3,806,437	4·54	83,666,503
1903...	24,862,109	25·88	63,089,448	65·67	3,396,145	3·53	4,716,823	4·91	96,064,526
1904...	26,901,831	26·84	64,673,919	64·53	4,031,662	4·02	4,612,022	4·61	100,219,436
1905...	28,959,649	27·20	68,203,320	64·13	3,961,769	3·07	5,342,459	5·01	106,467,198
1906...	33,392,188	26·64	81,433,115	64·97	4,510,649	3·59	5,986,912	4·77	125,322,865

OPERATING EXPENSES.

The operating expenses for 1909 amounted to $104,600,084.43, a decrease, as compared with 1908, of $2,704,058.08.

The proportion of operating expenses to gross earnings was 72.11. This was .93 less than in 1908.

The distribution of operating expenses was as follows:—

	1908.	Per cent.	1909.	Per cent.
	$		$	
Way and structures	20,778,609 78	19·37	21,153,274 46	20 22
Equipment	20,273,625 95	18·89	21,510,303 59	20·56
Traffic expenses			3,798,824 57	3·63
Transportation	62,486,270 59	58·23	54,284,587 41	51·89
General expenses	3,765,636 19	3·51	3,853,094 40	3·70

The above percentages show clearly that, whereas the operating expenses were reduced very considerably during the year, the economies did not apply to the up-keep of physical features. The proportion of outlay on maintenance of way and structures, and maintenance of equipment, was in both instances higher than for 1908. The saving effected, therefore, had reference almost wholly to the cost of conducting transportation, as will be made clear later.

It is not possible to make a comparison of the various divisions of operating expenses for 1909 with those of 1907 and 1908, for the reason that during the past year the division of traffic expenses was created. The items classified under that head, however, have been taken almost entirely from transportation. Maintenance of way and structures and maintenance of equipment were left undisturbed; so that a comparison with respect to those classes may be made with accuracy. Following are the facts for the years 1907, 1908 and 1909:—

	1907.	1908.	1909.
Way and structures	20·13	19·37	20·22
Equipment	20·88	18·89	20·56
Traffic			3·63
Transportation	55·25	58·23	51·89
General expenses	3·74	3·51	3·70

The comparison of dollars and cents in this connection is not so effective; yet it has its direct value. The results for the three years are as follows:—

	1907.	1908.	1909.
	$ cts.	$ cts.	$ cts.
Way and structures	20,887,091 66	20,778,609 78	21,153,274 46
Equipment	21,666,373 08	20,273,625 95	21,510,303 59
Traffic expenses			3,798,824 57
Transportation	57,325,543 26	62,486,270 59	54,284,587 41
General expenses	3,869,664 27	3,765,636 19	3,853,094 40

It was deemed expedient to elaborate operating expenses very considerably for 1909, in pursuance of the revision of accounting practice which had been foreshadowed in 1908. The multiplication of items and subdividing of accounts has, for the time being, made it difficult, in some cases impossible, to carry out close comparisons; but ample compensation for this interruption will be had in the detailed information afforded by the new classification.

A complete analysis of operating expenses for 1909 yields the following details:—

	Amount.	Per cent.
	$ cts.	
Maintenance of Way and Structures—		
Superintendence	759,240 98	·72
Ballast	198,796 80	·19
Ties	2,678,384 80	2·56
Rails	1,343,471 77	1·28
Other track material	1,084,342 40	1·03
Roadway and track	8,469,429 03	8·09
Removal of snow and ice	1,139,937 37	1·08
Tunnels	18,413 27	·01
Bridges, trestles and culverts	1,603,291 03	1·53
Over and under grade crossings	37,179 87	·03
Grade crossings, fences, &c	528,111 60	·49
Snow fences and sheds	91,538 47	·08
Signals and interlocking plants	131,419 79	·12
Telegraph and telephone lines	246,934 48	·23
Electric power transmission	4,646 36	·00
Buildings, fixtures and grounds	2,241,319 79	2·14
Docks and wharfs	187,879 64	·17
Roadway tools and supplies	238,798 60	·21
Injuries to persons	42,563 21	·04
Stationery and printing	40,519 73	·04
Other expenses	25,741 90	·02
Maintaining joint tracks, yards, &c., net balance	32,984 57	·03
Maintenance of Equipment—		
Superintendence	497,292 54	·47
Steam locomotives, repairs	9,427,704 22	9·01
" " renewals	411,781 23	·04
Electric locomotives, repairs	11,060 55	·01
Passenger train cars, "	2,595,472 23	2·48
" " renewals	158,959 43	·15
Freight " repairs	5,893,635 61	5·63
" " renewals	879,717 84	·84
Work equipment, repairs	454,543 08	·43
" " renewals	87,618 41	·08
Floating equipment, repairs	44,111 84	·04
Shop machinery and tools	761,738 82	·73
Power plant equipment	7,119 51	·00
Injuries to persons	33,614 04	·03
Stationery and printing	64,883 49	·06
Other expenses	121,201 13	·11
Maintaining joint equipment at terminals—Cr	4,298 56	·00
Equipment loaned and borrowed—Dr	60,653 23	·05
Traffic expenses—		
Superintendence	789,829 20	·75
Outside agencies	1,630,331 55	1·55
Advertising	698,539 25	·66
Traffic associations	74,397 04	·07
Fast freight lines	303,285 09	·29
Industrial and immigration bureaus	18,856 06	·02
Stationery and printing	278,799 24	·26
Other expenses	4,787 14	·00
Transportation Expenses—		
Superintendence	1,258,246 56	1·20
Despatching trains	794,148 07	·76
Station employees	7,144,573 81	6·83
Weighing and car service association	46,049 36	·04
Coal and ore docks	19,909 99	·01
Station supplies and expenses	798,021 05	·76
Yardmasters and their clerks	374,334 16	·35
Yard conductors and brakemen	1,533,070 52	1·46
Yard, switch and signal tenders	183,210,94	·17
Yard supplies and expenses	71,682 94	·06
Yard enginemen	1,144,827 42	1·09
Engine house expenses—yard	337,421 60	·32
Fuel for yard locomotives	1,433,354 45	1·37
Water for yard locomotives	80,869.73	·07
Lubricants for yard locomotives	31,159 05	·03
Other supplies for yard locomotives	34,274 79	·03
Operating joint yards, &c., balance—Dr	424,953 72	·40

	Amount.	Per cent.
	$ cts.	
Transportation Expenses—		
Motormen	10,599 40	·01
Road enginemen	6,305,369 08	6·02
Engine house expenses—road	2,075,177 82	1·98
Fuel for road locomotives	16,111,095 45	15·40
Water for road locomotives	746,594 70	·71
Lubricants for road locomotives	245,976 65	·23
Other supplies	287,462 54	·27
Operating power plant	28,515 15	·02
Road trainmen	6,584,565 63	6·29
Train supplies and expenses	2,201,549 18	2·10
Interlockers, block and other signals—operation of	223,370 27	·21
Crossing flagmen and gatemen	117,726 84	·11
Drawbridge operation	37,313 04	·03
Clearing wrecks	330,212 24	·31
Telegraph and telephone—operation	216,322 74	·20
Operating floating equipment	331,446 35	·31
Express service	6,532 66	·00
Stationery and printing	479,151 53	·46
Other expenses	238,914 58	·21
Loss and damage—freight	1,004,774 74	·96
" " baggage	21,973 64	·02
Damage to property	163,483 71	·15
" stock on right of way	59,626 02	·05
Injuries to persons	657,011 14	·63
Operating joint tracks—Dr.	76,728 69	·07
General Expenses—		
Salaries and expenses of general offices	739,028 29	·07
" " clerks and attendants	1,126,730 58	1·06
General office supplies and expenses	227,096 50	·21
Law expenses	480,924 76	·46
Insurance	593,060 31	·56
Relief department expenses	29,941 71	·02
Pensions	188,282 26	·18
Stationery and printing	152,910 01	·14
Other expenses	296,749 50	·27
General administration joint tracks, &c.—Dr.	18,370 48	·02

The foregoing details of operating expenses are so much more numerous than in previous years as to make a complete comparrison by items impracticable. Selecting what may be regarded as the principal accounts, which remain unchanged, and for convenience using only percentages, the following facts will be instructive:—

	1907.	1908.	1909.
Rails	1·27	1·49	1·28
Ties	2·35	2·05	2·56
Repairs and renewals of locomotives	8·45	7·48	9·40
" " passenger cars	2·61	2·54	2·63
" " freight cars	7·32	6·40	6·46
" " work cars	·15	·57	·52
Shop machinery and tools	·78	·72	·73
Fuel for locomotives	15·99	16·54	16·77
Water supply for locomotives	·69	·71	·79
Station employees	5·95	6·30	6·83
" supplies	·71	·71	·76
Advertising	·47	·53	·66
Outside agencies	1·24	1·40	1·56
Stationery and printing	·90	·95	·95
Loss and damage	·94	1·15	1·19
Injuries to persons	·67	·70	·63
Clearing wrecks	·45	·35	·31
Train supplies and expenses	1 97	2·00	2·10

The above statement leaves over 47 per cent of the operating expenses for 1909 unaccounted for; but the comparison could not with safety be carried further. In order, however, that the situation may be viewed for 1907, 1908 and 1909 within the limitations applicable to those years the following table from railway statistics for 1908 is repeated:—

——	1907.	Per cent.	1908.	Per cent.
	$ cts.		$ cts.	
Maintainance of ways and structures—				
Repairs of roadway	11,160,086 67	11·79	10,640,542 68	9·93
Renewals of rails	1,205,088 24	1·27	1,604,594 76	1·49
Renewals of ties	2,230,575 56	2·35	2,204,083 47	2·05
Repairs and renewals—bridges and culverts	1,408,552 02	1·48	1,465,753 45	1·37
" " fences, crossings, &c	481,129 18	·50	519,671 89	·49
" " buildings, &c	2,144,109 98	2·26	2,690,915 90	2·51
" " docks and wharfs	103,280 37	10	167,017 45	·16
" " telegraph	265,183 58	·28	294,301 15	·27
Stationery and printing	30,599 20	·03	43,924 32	·04
Other expenses	78,663 70	·08	1,122,793 11	1·05
Maintenance of epuipment—				
Superintendence	591,196 08	·62	621,032 61	·58
Repairs and renewals of locomotives	7,999,802 52	8·45	8,008,613 01	7·48
" " passenger cars	2,473,908 84	2·61	2,723,846 82	2·54
" " freight cars	6,933,574 61	7·32	6,855,843 98	6·40
" " work cars	146,148 39	·15	608,109 17	·57
" " marine equipmen	33,221 35	·03	52,181 21	·05
" " shop machinery and tools	738,833 13	·78	779,160 38	·72
Stationery and printing	74,466 22	·07	77,384 68	·07
Other expenses	815,751 04	·86	523,535 96	·49
Conducting transportation—				
Superintendence	1,611,297 91	1·70	1,956,260 03	1·83
Engine and roundhouse men	7,814,573 02	8·25	9,471,240 67	8·84
Fuel for locomotives	15,137,504 48	15·99	17,718,468 24	16·54
Water supply for locomotives	656,730 03	·69	764,790 58	·71
Oil, tallow and waste for locomotives	409,397 18	·43	383,670 36	·36
Other supplies for locomotives	195,970 04	·20	313,146 02	·29
Train service	6,228,136 56	6·58	8,155,855 59	7·61
Train supplies and expenses	1,873,515 88	1·97	2,136,581 33	2·00
Switchmen, flagmen, &c	2,013,294 16	2·12	1,690,242 28	1·58
Telegraph expenses	2,562,478 44	2·70	1,757,495 05	1·64
Station service	5,634,176 10	5·95	6,748,608 03	6·30
Station supplies	671,972 51	·71	765,240 87	·71
Switching charges—balance	114,516 96	·12	319,186 77	·30
Car mileage—balance	1,156,891 46	1·22	1,467,775 90	1·31
Hire of equipment—balance	106,008 61	·11	115,250 52	·10
Loss and damage	892,937 26	·94	1,232,518 70	1·15
Injuries to persons	642,248 43	·67	758,011 23	·70
Clearing wrecks	426,784 63	·45	372,627 40	·35
Operating marine equipment	918,769 17	·97	1,138,272 64	1·06
Advertising	451,673 54	·47	571,387 92	·53
Outside agencies	1,180,134 05	1·24	1,500,272 23	1·40
Commissions	77,509 43	·08	365,588 35	·34
Stock yards and elevators	185,304 78	·19	171,887 17	·16
Rents for tracks, terminals, &c	542,199 81	·57	1,333,401 74	1·24
Rents for buildings, &c	202,031 61	·21	135,834 45	·12
Stationery and printing	603,426 93	·63	740·851 59	·69
Other expenses	236,885 82	·25	295,729 67	·28
General expenses—				
Salaries of general officers	723,956 74	·76	775,732 94	·72
Salaries of clerks, &c	918,157 19	·97	1,085,738 37	1·01
General office expenses and supplies	195,204 97	·26	237·571 05	·22
Insurance	509,547 71	·53	615,638 68	·58
Law expenses	396,383 18	·41	445,076 69	·41
Stationery and printing	163,863 19	·17	161,271 64	·15
Other expenses	265,972 77	·28	386,499 27	·36

It is regrettable that the value of the above figures for purposes of comparison has to some extent been sacrificed by the new classification of operating expenses; but, as has been said, it is obvious the loss in that regard will be more than offset by the usefulness of the additional information which will hereafter be available.

The operating expenses represented $4,339.53 per mile of line, as compared with $4,672.30 in 1908.

The cost of running a train one mile in 1909, using the mileage of all trains as a basic factor, was $1,309, a decrease of .055 as against 1908.

For the ten years period between 1900 and 1909 the cost of running a train one mile has been as follows:—

1900	·864
1901	·944
1902	1·028
1903	1·117
1904	1·216
1905	1·213
1906	1·198
1907	1·381
1908	1·364
1909	1·309

It will be observed that the cost of operation per train mile has increased 51.5 per cent since 1900. On the other hand, as has been shown on a preceding page, the earnings per train mile have increased but 41.7 per cent within the same time.

Summarizing, for convenient comparison, some of the foregoing facts, the results are as follow:—

	1907.	1908.	1909.
	$	$	$
Gross earnings	146,738,214	146,918,313	145,056,336
Net earnings	42,989,537	39,614,171	40,456,251
Gross earnings per mile	6,535 64	6,397 21	6,017 89
Net earnings per mile	1,914 73	1,724 90	1,678 40
Earnings per passenger	1·219	1·175	1·195
" per ton	1·472	1·486	1·432
" passenger train mile	1·263	1·228	1·150
" freight train mile	2·069	2·008	2·041
" train mile, all trains	1·875	1·791	1·816
Operating expenses	103,748,672	107,304,143	104,600,084
" per mile	4,620 90	4,672 30	4,339 53
Cost of running trains one mile	1·381	1·364	1·309

EQUIPMENT.

In the numbers of locomotives and cars there were increases during 1909. The facts for the past three years are as follows:—

	1907.	1908.	1909.
Locomotives	3,504	3,872	3,969
Freight cars	107,407	115,709	117,779
Passenger cars	3,642	4,026	4,192

In addition to the foregoing, there were 65 locomotives and 9,345 cars under lease. There were also 7,859, cars returned as being in the company's service. The latter consisted of 88 officers' and pay cars, 2,608 gravel cars, 117 derrick cars, 1,750 cabooses and 3,296 other cars. Cars of all classes made up a total of 129,830.

The 3,969 locomotives were assigned to the following services:—

	1907.	1908.	1909.
Passenger	964	1,122	1,056
Freight	2,206	2,392	2,539
Switching	334	358	374

The available motive power for 1909 was equivalent to 165 locomotives for every 1,000 miles of line. On that basis these figures indicate a decrease of 4 locomotives, as compared with 1908. This reduction was probably due to the fact that the new mileage had not been brought up to the standard of the older lines in respect of equipment. The returns show that the average tractive power of locomotives has been steadily rising for years; so that it may be safely assumed the 97 locomotives added during the year represented a hauling capacity sufficient to compensate for the loss of motive power per thousand miles as expressed in numbers of engines.

During the year 166 cars were added to the passenger service of the Dominion. The classification of equipment under this head for the past three years was as follows:—

	1907.	1908.	1909.
First class	1,300	1,493	1,560
Second class	472	487	471
Combination	405	422	429
Emigrant	272	303	317
Dining	105	114	127
Parlour	63	63	60
Sleeping	212	236	261
Baggage, express and postal	782	873	926
Other	31	35	41
Total	3,642	4,026	4,192

The passenger car supply for 1909 was equivalent to 174 cars for every 1,000 miles of railway.

To the available freight car supply there were added 2,070 cars during the year, bringing the total up to 117,779. The following comparative statement will show the division of freight equipment by classes:—

	1907.	1908.	1909.
Box	68,149	72,863	74,477
Flat	20,477	21,759	21,188
Stock	4,817	5,047	5,518
Coal	10,358	11,616	11,721
Tank	132	197	197
Refrigerator	1,917	2,423	2,466
Other	1,557	1,804	2,212
Total	107,407	115,709	117,779

The freight equipment for 1909 represented an average of 4,887 cars per 1,000 miles of line, a falling off to the extent of 152 as compared with the preceding year. There were increases in all classes; but the additions did not keep pace with the expanding mileage.

An analysis of the capacity of the above mentioned classes of cars yields the following facts:—

	1907.		1908.		1909.	
	Number	Capacity. in tons.	Number.	Capacity. in tons.	Number.	Capacity. in tons.
Box	66,934	1,848,980	72,862	2,048,227	74,479	2,130,145
Flat	20,118	535,167	21,781	592,496	21,220	584,455
Stock	4,731	122,550	5,047	133,578	5,561	150,800
Coal	10,060	291,638	11,616	362,233	11,721	379,981
Tank	132	2,632	197	4,000	197	4,012
Refrigerator	1,745	48,745	2,423	69,000	2,465	71,085
Other	1,820	59,200	1,941	67,410	2,273	64,835
	105,540	2,908,903	115,867	3,277,394	117,916	3,385,313

It will be observed that the increase in the carrying capacity of all freight cars, as against 1908 was 107,919 tons.

The aggregate car supply for 1909 was equal to one car for every 567 tons of freight hauled. The tonnage per car in 1908 was 545.

The average carrying capacity of the 117,916 cars in freight service was 28.70 tons, a gain of .42 over the preceding year. As compared with 1907 the betterment was 1.14 tons, showing an appreciable advance towards heavier and larger cars.

There were 122,102 cars fitted with train brakes, and 125,069 with automatic couplers.

TRAIN, CAR AND LOCOMOTIVE MILEAGE.

The total revenue train mileage for 1909 was 79,662,216, an increase of 1,024,690 over 1908.

There were also 190,812 special train miles, and 3,521,894 non-revenue train mileage.

The division of train mileage for the past three years gives the following results:—

	1907.	1908.	1909.
Passenger trains	30,220,461	31,950,349	32,295,730
Freight trains	38,923,890	40,476,370	40,304,906
Mixed trains	5,971,414	6,210,807	7,061,580
Total	75,115,765	78,637,526	79,662,216

The proportion which each class of train mileage has borne to the total, during the above three year period, is as follows:—

——	1907.	1908.	1909.
Passenger trains	40·23	40·63	40·54
Freight trains	51·81	51·47	50·59
Mixed trains	7·90	7·90	8·87

Following is a statement of train and locomotive mileage since 1875:—

Year.	Passenger Trains.	Freight Trains.	Mixed Trains.	Total Train Mileage.	Engine Mileage.
1875	5,206,353	10,910,181	1,563,644	17,680,178	19,633,026
1876	5,837,461	9,616,148	2,650,019	18,103,628	21,001,052
1877	6,271,980	11,403,517	1,775,316	19,450,813	22,231,840
1878	6,225,327	9,981,786	3,462,334	19,669,447	24,091,600
1879	6,987,919	6,510,636	7,068,450	20,731,689	24,735,862
1880	7,312,168	10,775,380	4,157,292	22,427,449	26,575,969
1881	8,298,957	15,163,634	2,099,487	27,301,306	34,265,003
1882	15,074,891	15,638,013	2,357,393	27,846,411	33,374,847
1883	9,651,427	16,123,387	10,951,424	34,416,092	47,688,528
1884	9,315,694	15,710,630	4,254,595	29,758,676	37,390,874
1885	9,511,455	16,382,553	4,729,681	30,623,689	38,749,239
1886	9,214,131	15,914,127	5,182,557	30,481,086	37,359,494
1887	10,838,993	17,997,819	4,539,900	33,638,748	43,276,468
1888	11,859,684	20,651,834	4,763,318	37,391,206	46,489,229
1889	12,900,483	20,739,391	5,179,506	38,819,380	47,708,138
1890	14,362,870	22,428,249	5,058,210	41,849,329	49,512,630
1891	14,987,647	23,592,370	4,819,161	43,399,178	56,950,343
1982	15,237,093	24,399,014	4,812,361	44,448,468	56,994,253
1893	15,859,978	23,220,761	5,305,214	44,385,953	57,587,382
1894	16,542,860	21,423,496	5,803,673	43,770,029	57,401,514
1895	15,332,276	19,939,699	5,389,915	40,661,890	51,339,885
1896	15,846,645	23,299,776	5,354,181	44,500,602	55,786,960
1897	17,237,974	23,595,000	4,947,877	45,780,851	54,729,490
1898	19,305,603	26,868,366	4,514,424	50,688,283	60,103,944
1899	20,093,378	26,922,348	5,199,481	52,215,207	64,582,807
1900	20,922,098	24,662,906	9,592,867	55,177,871	67,712,252
1901	19,115,472	23,888,302	10,345,620	53,349,394	68,621,424
1902	21,104,036	24,891,813	9,734,007	55,729,856	70,275,615
1903	22,095,705	28,840,434	9,446,781	60,382,920	77,178,493
1904	23,502,876	28,278,310	9,530,816	61,312,002	80,508,064
1905	25,428,018	34,372,998	6,133,098	65,934,114	84,335,732
1906	28,071,648	39,045,168	5,606,666	72,723,482	94,180,788
1907	30,220,461	38,923,890	5,971,414	75,115,765	100,154,966
1908	31,950,349	40,476,370	6,210,807	78,637,526	100,622,241
1909	32,295,730	40,304,906	7,061,580	79,662,216	97,865,325

The mileage of loaded freight cars in 1909 was 775,543,414, an increase of 26,618,594 over 1908.

Empty car mileage was 281,175,615, a decrease of 3,768,914 as compared with the preceding year.

The mileage of caboose cars amounted to 37,644,038, which, added to the foregoing items, brought the total car mileage up to 1,094,363,067.

As has been pointed out on a preceding page, the average number of loaded cars per train in 1909 was 16.37, and the average load per car 16.98 tons. The average freight train load consisted of 278 tons.

The earnings per freight train mile and per ton of freight hauled are shown in the following table:—

Year.	Freight Earnings.	Freight Train Mileage.	Number of Tons Carried.	Earnings per Freight Train Mile.	Average Earnings per Ton Carried.
	$	Mileage.	Tons.	$ cts.	$ cts.
1875	12,073,570	12,473,825	5,670,837	·988	2·129
1876	12,211,158	12,266,167	6,331,757	·995	1·928
1887	11,321,264	13,178,833	6,859,796	·859	1·650
1878	13,129,191	13,444,120	7,883,472	·977	1·665
1879	12,509,093	13,579,086	8,348,810	·921	1·498
1880	15,506,935	14,932,672	9,938,858	1·038	1·560
1881	18,666,982	17,263,121	12,065,323	1·081	1·547
1882	17,729,945	18,013,406	13,575,787	·984	1·305
1883	21,320,208	27,074,761	13,266,255	·787	1·607
1884	20,763,243	19,965,225	13,712,269	1·039	1·514
1885	19,962,058	21,112,234	14,659,271	·946	1·371
1886	21,183,967	21,096,684	15,670,460	1·004	1·351
1887	24,581,047	22,537,719	16,356,335	1·091	1·502
1888	26,410,084	25,415,152	17,172,759	1·039	1·537
1889	26,671,049	25,918,897	17,928,626	1·029	1·487
1890	29,921,788	27,486,459	20,787,469	1·089	1·439
1891	30,584,645	28,411,531	21,753,021	1·075	1·404
1892	33,230,121	29,211,375	22,189,923	1·138	1·502
1893	32,935,028	28,525,975	22,033,599	1·155	1·496
1894	29,982,482	27,227,169	20,721,116	1·101	1·446
1895	29,545,490	25,329,614	21,524,421	1·166	1·372
1896	32,368,082	28,653,957	24,266,825	1·130	1·333
1897	33,522,102	28,542,877	25,300,331	1·174	1·324
1898	38,508,175	31,382,790	28,785,903	1·227	1·340
1899	40,101,036	32,121,829	31,211,753	1·248	1·284
1900	45,643,699	34,255,773	35,946,183	1·332	1·269
1901	46,665,103	33,233,922	36,999,371	1·363	1·261
1902	53,986,672	34,625,820	42,376,527	1·559	1·273
1093	63,089,448	38,287,215	47,373,417	1·648	1·331
1904	64,673,919	30,809,126	48,097,519	1·711	1·344
1905	68,203,320	40,506,096	50,893,957	1·684	1·340
1906	81,433,115	44,651,834	57,966,713	1·824	1·405
1907	94,995,087	44,895,304	63,866,135	2·116	1·472
1908	93,746,655	46,687,177	63,071,167	2·008	1·486
1909	95,714,783	47,366,436	66,842,258	2·041	1·432

The locomotive mileage for the year was 97,865,325. In 1908 it was 100,622,241.

For the years 1907, 1908 and 1909 the locomotive mileage by classes of locomotives was as follows:—

Class of Locomotive.	1907.	1908.	1909.
Freight	43,824,909	42,291,082	43,280,549
Passenger	29,110,258	30,504,171	32,282,534
Mixed	7,492,278	7,410,971	7,237,422
Switching	14,816,272	14,941,179	14,832,834
Construction	4,911,249	5,474,838	231,986
Total	100,154,966	100,622,241	97,865,325

In 1909 the mileage given above under the head of 'construction' was returned as 'special,' and obviously had reference to special trains. The mileage of locomotives attached to work trains seems to have been omitted during the past year.

CONSUMPTION OF FUEL BY LOCOMOTIVES.

In 1909 locomotives consumed 6,832,108 tons of fuel, consisting of 6,799,148 tons of bituminous coal, 9,675 tons of anthracite coal, 2,188 cords of hard wood and 43,658 cords of soft wood.

Comparing the consumption of fuel for the past three years, the result is as follows:—

Year.	Tons.	Cost.
1907	5,608,954	15,137,504
1908	5,970,791	17,718,468
1909	6,832,108	17,544,449

The cost of fuel in 1909 represented $16,111,095 for road locomotives and $1,433,354 for yard locomotives.

In 1909 the fuel consumption by classes of locomotives, the engine mileage and the amount of fuel consumed per 100 miles were as follows:—

Class of Locomotive.	Coal.		Wood.		Total.	Miles Run.
	Anthracite.	Bituminous.	Hard.	Soft.		
	Tons.	Tons.	Cords.	Cords.	Tons.	
Freight	4,534	3,816,810	1,138	21,809	3,833,010	43,280,549
Passenger	2,600	1,824,836	595	13,739	1,834,700	32,282,534
Mixed	2,314	406,963	364	2,566	410,800	7,237,422
Switching	227	740,944	91	5,492	743,977	14,832,834
Special	.....	9,595	.....	52	9,621	231,986
Total	9,675	6,799,148	2,188	43,658	6,832,108	97,865,325

Note.—One and a half cords hard wood equals one ton of coal. Two cords soft wood equals one ton of coal.

For the three year period the fuel consumed by the various classes of locomotives was as follows:—

Class of Locomotive.	1907.	1908.	1909.
	Tons.	Tons.	Tons.
Freight	3,194,510	3,318,283	3,833,010
Passenger	1,331,178	1,446,919	1,834,700
Mixed	303,549	350,921	410,800
Switching	557,576	598,092	743,977
Construction	223,141	256,576	9,621
Total	5,608,954	5,970,791	6,832,108

The fuel consumed by each class of locomotive per 100 miles run, and the cost, are given in the following statement:—

Class of Locomotives.	Fuel consumed per 100 miles.			Cost of Fuel per 100 miles.		
	1907.	1908.	1909.	1907.	1908.	1909.
	Tons.	Tons.	Tons.	$	$	$
Freight	7·29	7·84	8·85	19·61	23·20	22·65
Passenger	4·57	4·74	5·68	12·29	14·03	14·54
Mixed	4·05	4·73	5·67	10·89	14·00	14·51
Switching	3·76	4·00	5·01	10·11	11·84	12·82
Construction	4·54	4·69	4·14	12·21	13·88	10·59

To make the above calculation clear, it should be stated that the average cost of fuel per ton was $2.69 in 1907, $2.96 in 1908 and $2.56 in 1909.

ACCIDENTS.

There were 478 persons killed and 1,404 injured by the railways of Canada in 1909. These figures represent an increase over 1908 of 29 in the number killed and a decrease of 943 in the number injured.

There were also 27 persons killed and 782 injured in railway service from causes other than the movement of trains, locomotives or cars. The final aggregate would therefore be 505 killed and 2,186 injured.

The accidents during 1907, 1908 and 1909 affected the following classes of persons:—

	Killed.			Injured.		
	1907.	1908.	1909.	1907.	1908.	1909.
Passengers	70	28	36	352	345	281
Employees	249	224	182	1,126	1,793	897
Trespassers	195	156	190	125	120	95
Non-trespassers	70	22	67	88	59	89
Postal clerks, expressmen, &c.	3	16	.....	7	3	25
Other persons	11	3	3	454	27	17
Total	598	449	478	2,152	2,347	1,404

Taking the same three year period, the causes of accidents to passengers were reported to have been as follows:—

Causes.	Killed.			Injured.		
	1907.	1908.	1909.	1907.	1908.	1909.
Collisions	26	2	6	93	88	83
Derailments	21	8	1	127	131	99
Parting of trains	.....	.....	.....	3	1	.....
Falling from trains, &c	2	6	11	36	20	11
Jumping on or off	10	6	14	38	50	57
Struck at highways	4	.....	1	7	.....	.....
" stations	4	3	1	3	5	5
" other points	.....	2	.....	1	1	1
Other causes	3	1	2	44	49	25
Total	70	28	36	352	345	281

The returns for 1909 show that one passenger in every 907,869 was killed, and one in every 116,311 injured.

Accidents to employees were assigned to the following causes:—

Causes.	Killed.			Injured.		
	1907.	1908.	1909.	1907.	1908.	1909.
Coupling or uncoupling	34	20	18	141	183	125
Collisions	46	25	40	135	80	86
Derailments	12	15	15	56	60	65
Parting of trains	2	1	.....	16	11	9
Locomotives or cars breaking down	1	1	1	6	16	6
Falling from trains or cars	32	32	28	186	185	142
Jumping on or off	7	8	9	66	108	95
Struck by trains, &c	85	81	53	130	116	88
Overhead obstructions	2	3	.....	13	14	11
Other causes	28	16	18	377	340	270
Total	249	224	182	1,126	1,113	897

The above accidents were distributed among the following classes of employees:—

Employees.	Killed.			Injured.		
	1907.	1908.	1909.	1907.	1908.	1909.
Trainmen	149	109	113	791	790	693
Trackmen	53	36	37	104	307	71
Switch tenders, watchmen, &c	7	11	3	47	40	27
Stationmen	3	4	2	3	66	10
Shopmen	9	11	7	16	284	16
Telegraph employees	.....	2	.....	3	4	3
Other employees	28	51	20	167	312	77
Total	249	224	182	1,121	1,793	897

The above figures show that of the 19,443 trainmen employed in 1909, one in every 172 was killed and one in every 28 injured.

By another standard of reckoning the hazard, it transpired that in 1909 one trainman was killed for every 737,831 miles trains were run, and one injured for every 120,310 miles. For the purposes of this calculation the mileage of trains, revenue and non-revenue, was used.

The accidents to employees from causes other than the movement of trains were distributed among the following classes:—Stationmen, 5 killed and 32 injured; shopmen, 5 killed and 269 injured; trackmen, 9 killed and 248 injured; other employees, 8 killed and 233 injured.

During 1909 there were 76 persons killed and 72 injured at highway crossings. The inquiry which was begun in 1908, as to relative number of accidents occurring at urban and rural crossings, was continued in 1909. Following is the result:—

Highway Crossings.	Killed.		Injured.	
	1908.	1909.	1908.	1909.
Urban	30	33	35	41
Rural	21	43	33	31
Total	51	76	68	72

By reference to a succeeding division of the report it will be seen that in 1909 there were 1,767 unprotected urban crossings in the Dominion, and 15,426 unprotected rural crossings. Assuming that all the accidents took place at unprotected crossings, it will be seen that one person was killed for every 359 and one injured for every 497 of such rural intersections; while one person was killed for every 54, and one injured for every 43, unprotected urban crossings. The deduction suggested from these facts is that the hazard bears a more or less direct relationship to the extent to which any particular crossing is used.

It would appear to be an unwarranted assumption that so called protected crossings absolutely prevent loss of life or the infliction of injury, particularly at congested points in large centres. Out of 30 persons killed in 1908 at urban crossings, 10 lost their lives at protected intersections. In 1907 the number was 21. In 1909 the returns show 22. In other

words, in 1909, of the 33 fatal accidents at urban crossings, 70 per cent occurred at crossings having some form of protection. The accidents in such cases befall pedestrians who, in defiance of the lowered gates, seek to cross the tracks or pass under or over cars.

Following is a summary of facts in relation to railway accidents since 1888:—

Years.	Passengers.		Employees.		Others.		Total.		Passengers.	
	Killed	Injured.	Killed	Injured.	Killed	Injured.	Killed	Injured.	One killed in every	One injured in every
1888.....	20	70	107	619	104	86	213	775	534,931	152,837
1889.....	37	103	89	637	84	135	210	875	328,408	117,971
1890.....	11	52	83	682	124	101	218	835	1,165,569	246,562
1891.....	13	105	65	582	118	131	193	818	1,017,120	125,929
1892.....	14	43	110	697	109	139	233	879	966,672	314,730
1893.....	11	57	72	331	133	120	216	708	1,238,002	238,912
1894.....	12	64	67	521	132	107	211	694	1,205,208	225,976
1895.....	9	47	51	489	127	122	187	658	1,554,175	297,608
1896.....	11	62	46	446	104	111	161	619	1,346,400	238,877
1897.....	7	70	76	579	130	158	213	807	2,310,191	231,019
1898.....	5	72	98	862	167	163	270	1,097	3,688,809	256,167
1899.....	20	119	119	882	145	184	284	1,185	956,668	160,784
1900.....	7	131	123	941	195	245	325	1,317	3,071,453	164,123
1901.....	16	134	118	970	183	213	317	1,317	1,149,108	137,207
1902.....	19	177	146	930	165	221	330	1,328	1,088,419	116,836
1903.....	53	258	186	956	181	239	420	1,453	417,900	85,848
1904.....	25	232	192	214	178	259	395	705	945,630	101,899
1905.....	35	244	206	920	227	193	468	1,357	722,535	103,642
1906.....	16	231	139	893	206	241	361	1,365	1,749,361	121,168
1907.....	70	352	249	1,126	268	220	587	1,698	459,104	91,299
1908.....	28	345	224	1,113	197	209	449	2,347	1,215,893	98,681
1909.....	36	281	182	897	260	226	478	1,404	907,869	116,311

Details by railways will be found in Table No. 16.

HIGHWAY CROSSINGS.

An effort was made last year, to obtain from the railways specific information with regard to the number of protected highway crossings in the Dominion. The word 'guarded' was used, and in several instances it was misunderstood to include a crossing having cattleguards. The data collected was thus rendered valueless. For 1909, the inquiry was given three aspects: first, the number of protected highway crossings; second, how protected; and third whether the protected crossing was urban or rural as to location.

The returns were complete, and they disclosed the following facts:—

	Urban.	Rural.	Total.
Protected crossings.....	587	492	1,079
Unprotected crossings.....	1,767	15,426	17,193
Total.....	2,354	15,918	18,272

It will be seen that 3.09 per cent of rural, and 24.93 of urban, crossings were protected. The term 'urban' is here applied to cities and towns. Villages are classified as rural.

As to the means by which protection was afforded, the following summary gives the facts in that regard:—

How Protected.	Rural.	Urban.
By gates	34	133
By overhead bridges	190	110
By subways	213	166
By bells	39	77
By watchmen	16	101
Total	492	587

The inquiry as to highway crossings will be continued, and the information thus gathered will accurately show to what extent the menace from this source is being reduced by the adoption of protective measures.

RAILWAY EMPLOYEES.

There were 125,195 employees in the service of Canadian railways on June 30, 1909, as compared with 106,404 on the same date 1908. This gain of 18,791 brought the figures for 1909 ahead of the record for 1907, by 1,183.

Salaries and wages amounted to $63,216,662.08, or equal to 69.43 per cent of the total operating expenses.

Following is a statement showing the number of employees by classes for the years 1907, 1908 and 1909:—

——	1907.	1908.	1909.
General officers	336	318	328
Other officers	461	526	574
General office clerks	4,214	4,795	5,967
Station agents	2,536	2,522	2,624
Other stationmen	11,829	8,908	10,739
Enginemen	4,351	3,868	4,104
Firemen	4,760	4,206	4,330
Conductors	2,911	2,719	2,831
Other trainmen	8,261	7,507	8,178
Machinists	2,486	2,759	3,294
Carpenters	3,215	3,190	3,377
Other shopmen	12,579	11,873	13,858
Section foremen	3,903	4,017	4,216
Other trackmen	30,614	20,068	28,401
Switch tenders, &c	2,364	1,849	1,624
Telegraph operators	2,987	2,686	2,899
Employees—floating equipment	5,426	7,273	9,324
All other employees	20,779	17,320	18,527
Total	124,012	106,404	125,195

The above numbers for 1909, were equal to 5.19 employees per mile of line, as compared with 4.63 for 1908.

For the first time an analysis of salaries and wages has been made, showing the average daily compensation by classes:—

—	1907.	1908.	1909.
	$	$	$
General officers	11 74	11 59	11 73
Other officers	4 11	4 63	4 59
General office clerks	1 70	1 81	1 81
Station agents	1 91	2 04	2 09
Other stationmen	1 56	1 71	1 65
Enginemen	3 89	4 53	4 13
Firemen	2 42	2 50	2 52
Conductors	3 20	3 30	3 31
Other trainmen	1 92	2 06	2 13
Machinists	2 41	2 68	2 89
Carpenters	2 09	2 19	2 23
Other shopmen	1 99	2 16	2 33
Section foremen	2 06	2 25	2 15
Other trackmen	1 45	1 57	1 59
Switch tenders, &c	1 84	1 81	2 00
Telegraph operators	1 88	2 07	2 09
Employees—floating equipment	1 18	1 10	1 26
All other employees	1 81	1 87	1 95

The outstanding feature in the above table is the fact of increases to all classes, as between 1907 and 1909, with the single exception of general officers.

The distribution of salaries and wages during the past three years, has been as follows:—

—	1907.	1908.	1909.
	$	$	$
Way and structures	15,398,885	14,715,572	14,249,186
Equipment	12,161,917	13,008,104	14,623,930
Traffic expenses	.....	.....	5,353,607
Transportation expenses	27,398,553	28,479,096	24,656,585
General expenses	3,760,138	4,173,835	4,333,354

The new division of Traffic Expenses, it may be explained, was created almost wholly out of Transportation Expenses.

TAXATION OF RAILWAYS.

The tax bill of Canadian railways amounted to $1,594,880 in 1909, an increase over 1908 of $275,480.

It is thought well to repeat the information given last year, with regard to the basis of taxation in the several provinces:

Ontario.—Section 6 of 'An Act to Supplement the Revenues of the Crown,' assented to on April 14 last, provides:

'Every company owning, operating or using a railway shall pay a tax of $60 per mile for one track, and, where the line consists of two or more tracks, of $20 per mile for each additional track, owned, operated or used in any organized county; and of $40 per mile for one track, and, where the line consists of two or more tracks, of $10 per mile for each

additional track, in territory without county organization: provided that a company owning, operating or using a railway which, either by itself or in conjunction with any other railway leased by it or to which it is leased or with which it is amalgamated or together with which it forms one system does not exceed 150 miles in length from terminus to terminus, shall in lieu of the said tax pay a tax of $15 per mile for one track and, where the line consists of two or more tracks, of $5 per mile for each additional track, and where the railway or system does not exceed 30 miles in length from terminus to terminus a tax of $10 per mile for one track and $5 per mile for each additional track.

'Every company owning, operating or using a street railway or part thereof in a city for carrying passengers shall pay for each mile of track within the city a tax of: (*a*) $20 when such mileage does not exceed twenty miles; (*b*) $35 when such mileage exceeds 20 miles but does not exceed 30 miles; (*c*) $45 when such mileage exceeds 30 miles but does not exceed 50 miles, and (*d*) $60 when such mileage exceeds 50 miles. The mileage shall be computed on the single track, each mile of double track being counted as two miles of single track; but in calculating the mileage switches or sidings, tracks into car stables or car sheds, Y's and curves laid at street corners and portions of track not in general use for passenger traffic shall not be counted.'

The municipalities also impose taxes on railways in Ontario.

Quebec.—Section 8 of 'The Act to impose taxes on Commercial Corporations, etc.,' reads:

'Every railway company owning, operating or using in whole or in part in this province, a steam or electric railway, shall pay upon each main line thirty dollars per mile for one track, and, where the line consists of two or more tracks, fifteen dollars per mile for each additional track owned, operated or used as aforesaid; upon each branch line twenty dollars per mile for one track, and where the line consists of two or more tracks, ten dollars per mile for each additional track.'

A municipal tax also exists in the province of Quebec.

Nova Scotia and New Brunswick.—In neither of these provinces are railways subject to any form of taxation.

Manitoba.—Section 5 of the Act relating to Railway Taxation enacts:

'In order to supplement the Revenue of the Crown in the province of Manitoba every railroad company at present owning or operating, or which may hereafter own or operate, any line or lines of railroad within the said province shall annually pay to the Crown in the province a part or portion of the gross earnings of such railway companies in the province of Manitoba as follows:—In and for the year 1900, 1901 and 1902, two per cent of the gross earnings of such companies. In each and every year after the year 1902 such sums as may be determined by the Lieutenant Governor in Council not exceeding, however, three per cent of the gross earnings of the companies.'

Saskatchewan.—Section 3 of the 'Act respecting the Taxation of the Earnings of Railway Companies' provides as follows:—

'Every railway company at present owning or operating or which may hereafter own or operate any line or lines of railway situated or partly situated within Saskatchewan shall during the year one thousand nine hundred and eight and annually thereafter pay to the Crown in this province such part or portion of its gross earnings derived from the said line or lines of railway or such portions thereof as are within Saskatchewan as may be determined by the Lieutenant Governor in Council not to exceed the following:—(*a*) In respect of that part of the railway or branch of railway in operation for seven years or more three per cent of the gross earnings derived from the operation of the same; (*b*) In respect of that part of the railway or branch of railway in operation for five years or more and less than seven years one and one-half per cent of such gross earnings: Provided that no tax shall be payable hereunder on the gross earnings of any railway or branch thereof until such railway or branch has been in operation for five years.'

Alberta.—Railways are taxed on a rate of one per cent upon their actual value. Pending an inquiry as to the facts in that regard, the value is assumed by law to be $20,000 per mile. On that basis taxes have been levied during the past two years.

ELECTRIC RAILWAYS.

A complete reorganization of the basis of reporting by electric railways took place during the year. Since the collection of statistics began in 1901 it had been the practice to merely distribute schedules for the purposes of the annual return to this department. These schedules were probably the best that could be devised in the absence of any pattern or experience in dealing with such data. They were more or less general in character. Each railway followed its own method of accounting. The essential facts with regard to capital, public service, earnings, operating expenses, employees, equipment and accidents were no doubt accurately reported; but they were not in a form to permit of comparisons being made. Important and useful details were lacking. In the meantime, the number of lines multiplied and the business of electric railways increased greatly. The time was opportune for the installation of a new and carefully considered system in relation to statistics.

Classifications and schedules were printed and distributed; but this heavy task could not be carried out until nearly six months of the railway year had passed. It had been my privilege, however, to meet the members of the Canadian Street Railway Association on 11th November, 1908, and to explain to them the general features of the proposed changes. They heartily approved of the new plan, and expressed their willingness to co-operate. I desire in this way to gratefully recognize the response of electric railway corporations to the demands made upon them under circumstances which must have been exceedingly inconvenient to many of them.

This year, however, for the first time the legal right of the department to ask for statistical information from corporations operating under a provincial charter has been questioned. This grave issue was raised by the largest reporting railway in the Dominion, the Montreal Street Railway Company. It would not, perhaps, be proper for me to discuss the technical aspects of this matter; but it will at least be generally conceded that, if any doubt exists as to the jurisdiction of the department in the premises, public interests demand that legislative steps should immediately be taken to set that point at rest. Canada has now adopted a system of street railway statistics which secures a uniform standard of reporting over North America, and it would be on the side of retrogression if it should lie in the power of any single corporation to render nugatory, or even to cripple, this commendable movement. In this instance, the Montreal Street Railway Company declined to conform with the requirements of the new schedules, for the reason above indicated, and to that extent the statistical tables for 1909 are incomplete.

MILEAGE.

The total mileage of electric railways in Canada in 1909 may be put at 988.97. This would show a decrease of 3.06 miles, as compared with 1908; but there was actually an increase. There has all along been confusion on the part of reporting lines as to the proper method of computing mileage, due almost wholly to the lack of a specific classification on the subject. That difficulty has been removed, and hereafter the facts in relation to mileage will be returned on a uniform basis. The mileage of 988.97 for 1909, following the analogy of steam railways, refers to first main track. The details with respect to mileage are as follows:—

Length of first main track	988.970
Length of second main track	215.057
Total length of main track	1,204.027
Length of sidings and turnouts	83.624
Total, computed as single track	1,287.651

It is not possible to turn back and revise the returns for preceding years, and the figures as reported are used in the following summary relating to mileage:—

1901	674·58*
1902	557·59
1903	759·36
1904	766·50
1905	793·12
1906	813·74
1907	814·52
1908	992·03
1909	988·97

*Improperly included double track and sidings.

CAPITAL LIABILITY.

The paid-up capital on June 30, 1909, aggregated $91,604,989, as against $87,409,885 in 1908. The increase was therefore $4,195,104.

The capital statement for 1907, 1908 and 1909 is as follows:—

——	1907.	1908.	1909.
	$	$	$
Stocks	43,491,746	50,295,266	51,946,433
Funded debt	31,166,976	37,114,619	39,658,556
Total	74,658,722	87,409,885	91,604,989

From the foregoing has been omitted the subsidies paid by governments and municipalities. These amounted to $493,346 in 1908. They do not form a proper charge to capital.

EARNINGS AND OPERATING EXPENSES.

The gross earnings for the year 1909 were $14,824,936.55, showing a gain of $817,887 over the preceding year.

The following is a comparison of earnings for the years 1907, 1908 and 1909:—

——	1907.	1908.	1909.
	$	$	$
Passenger	12,013,421	13,233,724	14,080,755
Freight	344,367	346,021	386,092
Mails and express	41,951	54,883	110,452
Other earnings	233,190	372,421	34,185
Total	12,630,430	14,007,049	14,611,484

The decrease in 'other earnings' for 1909 is accounted for by a change of classification, which limited this item to 'other car earnings,' and transferred sums previously credited under this head to 'miscellaneous income,' which forms part of the account dealing with net income.

The balance sheet for the year 1909, prepared in accordance with the new form, is as follows:—

Earnings and income:		
Gross earnings from operation		$14,811,725 97
Miscellaneous income		988,124 96
		15,799,850 93
Operating expenses	$8,885,235 70	
Deductions from income:		
Taxes	843,959 12	
Interest on funded debt	1,213,142 24	
Interest on floating debt	104,573 13	
Other deductions	36,631 99	
		11,083,542 18
Net income		$ 4,716,308 75

It must be remembered, of course, that the operating expenses as given above include $246,192.77 of net loss by certain railways.

The above net income was equal to 5.13 per cent on the electric railway capitalization of $91,604,989.

The operating expenses for 1909 were $8,884,690.71. These figures are slightly below those given in the statement above, in consequence of misunderstandings with respect to the charging of certain small items under the new classification. They fit, however, to the following details:——

Maintenance of way and structures:	
Track and roadway	$386,646 54
Electric line	94,249 33
Buildings and fixtures	50,241 32
Maintenance of equipment:	
Steam plant	18,008 61
Electric plant	36,682 74
Cars	405,497 36
Electric equipment of cars	321,050 88
Miscellaneous equipment	48,317 04
Miscellaneous shop expenses	39,608 67
Transportation—Operation of power plant:	
Power plant wages	127,015 19
Fuel for power	184,719 72
Water for power	20,818 00
Lubricants and waste for power plant	8,262 43
Miscellaneous supplies and expenses	26,124 49
Hired power	686,128 63
Transportation—Operation of cars:	
Superintendence	130,475 58
Wages of conductors	1,181,244 60
Wages of motormen	1,150,002 77
Wages, miscellaneous car service employees	121,009 71
Wages, car house employees	307,351 76
Car service supplies	53,713 15
Miscellaneous car service expenses	75,940 59
Hired equipment	25,988 40
Cleaning and sanding track	26,703 64
Removal of snow and ice	100,154 28
General:	
Salaries of general officers	153,665 61
Salaries of clerks	154,213,54
Printing and stationery	28,157 11
Miscellaneous office expenses	32,422 53
Store expenses	20,133 95
Stable expenses	17,059 38
Advertising and attractions	55,343 96
Miscellaneous general expenses	151,399 58
Damages	201,877 48
Legal expenses—damages	19,147 15
Miscellaneous legal expenses	26,764 29
Rent of land and buildings	15,628 20
Rent of track and terminals	73,087 18
Insurance	85,235 41

The above operating expenses were equal to 59.93 of the gross earnings. In 1908 the proportion was 62.08.

PUBLIC SERVICE.

The electric railways of Canada carried 314,026,671 fare passengers in 1909, and 81,670,945 transfer passengers—making 395,697,616 in the aggregate.

Using the primary total for purposes of comparison, it is interesting to observe the growth of passenger traffic since 1901. Following are the figures:—

1901	120,934,656
1902	137,681,402
1903	155,662,812
1904	181,689,998
1905	203,467,317
1906	237,655,074
1907	273,999,404
1908	299,099,309
1909	314,026,671

The total car mileage was 60,152,846, of which 737,720 was in connection with the carrying of freight, mails and express.

EQUIPMENT.

There were of all classes 3,544 cars in the service of electric railways in 1909. These were classified as follows:—

Passenger, closed	1,689
" open	1,017
" combination	337
Freight	152
Mail, express and baggage	20
Combination, passenger and freight	7
Work	85
Snow ploughs	54
Sweepers	90
Miscellaneous	93
Total	3,544

EMPLOYEES.

The number of employees in 1909 was 10,557—a gain of 603 over 1908. The aggregate of salaries and wages paid to this staff was $6,761,281.12. This sum was equal to 77.84 per cent of the total operating expenses.

The employees were distributed according to the following division:—

General Administration—	
General officers	132
General office clerks	413
Maintenance—	
Superintendents	72
Other employees	3,548
Transportation—	
Superintendents	100
Other employees	6,292
Total	10,557

ACCIDENTS.

The return of accidents for 1909 shows 68 persons killed and 2,139 injured—an increase over 1908 of one in the number killed and 256 in the number of injured.

These accidents were divided up as follows:—

	Killed.	Injured.
Passengers	11	1,303
Employees	7	218
Others	50	618
Total	68	2,139

The following summary of statistical facts will be instructive:—

——	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.
Total mileage	*674·58	557·59	759·36	766·50	793·12	813·74	814·52	992·03	988·97
Paid up Capital	$39,076,018	41,593,063	47,096,453	50,399,188	61,033,321	63,857,967	73,567,795	87,903,231	91,604,989
Gross earnings	$5,768,283	6,486,438	7,233,677	8,453,609	9,357,125	10,966,871	12,630,430	14,007,049	14,611,484
Net earnings	$2,333,120	2,683,583	2,760,819	3,127,092	3,438,931	4,291,834	4,971,624	5,311,170	4,962,501
Earnings—passenger traffic	$5,529,687	6,195,915	6,888,409	8,082,373	8,932,913	10,438,000	12,013,421	13,233,724	14,080,755
" freight	$95,082	127,917	164,188	182,143	216,022	288,105	344,367	346,021	386,092
" mails and express	$33,135	15,952	20,276	30,738	31,753	35,041	41,951	54,883	110,452
" other sources	$110,377	146,652	160,803	158,353	176,435	205,724	233,190	372,421	34,185
Total operating expenses	$3,435,162	3,802,855	4,472,858	5,326,516	5,918,194	6,675,037	7,373,251	8,695,880	8,885,235
Maintenance of way and buildings	$310,892	445,837	481,236	606,146	629,656	608,767	765,684	912,929	643,135
Cost of motive power	$502,101	541,087	777,201	1,377,199	1,240,001	1,242,075	1,412,358	1,803,723	1,445,227
Maintenance of cars	$322,700	353,891	606,602	659,213	747,073	894,460	1,060,783	1,118,925	1,184,287
General and operating charges	$2,299,468	2,462,038	2,607,817	2,683,957	3,301,462	3,929,733	4,498,424	4,860,303	5,612,041
Total car mileage	31,750,754	35,833,841	38,028,529	42,066,124	45,959,101	50,618,836	53,361,227	56,964,881	60,152,846
Passengers carried	120,934,656	135,681,402	155,662,812	181,689,998	203,467,317	237,655,074	273,999,404	299,099,309	314,026,671
Tons of freight carried	287,926	266,182	371,286	400,161	510,350	506,024	479,731	732,475	.....

*Improperly included, double track and sidings.

ACCIDENTS.

Years.	KILLED.				INJURED.				PASSENGERS.		
	Passengers.	Employees.	Others.	Total.	Passengers.	Employees.	Others.	Total.	Number carried.	Killed one in every	Injured one in every
1901	3	1	11	15	158	58	98	314	120,934,656	40,311,552	255,137
1902	9	1	22	32	410	33	120	563	137,681,402	15,297,933	335,808
1903	10	7	22	39	504	62	212	778	155,662,812	15,566,281	308,855
1904	10	3	40	53	508	64	272	844	181,689,998	18,168,999	357,657
1905	30	3	23	56	862	87	347	1,296	203,467,317	6,782,243	236,041
1906	11	2	34	47	1,085	127	441	1,653	237,655,074	21,605,006	219,327
1907	27	7	37	71	988	216	532	1,736	273,999,404	10,148,126	277,327
1908	18	6	43	67	1,156	188	539	1,883	299,099,309	16,616,628	258,736
1909	11	7	50	68	1,303	218	618	2,139	314,026,671	28,547,879	241,001

Details with respect to the foregoing facts will be found in tables forming the body of the annexed report.

I have the honour to be,
Sir,
Your obedient servant,

J. L. PAYNE,
Comptroller of Statistics.

SESSIONAL PAPER No. 20b

TABLE 1.—Location of Steam Railway of the Dominion of Canada, to June 30, 1909

Name of Railway.	Description.	Distance. Miles.	Distance. Total.
Alberta Railway and Irrigation Co.	From Lethbridge, Alberta, to Coutts, on International boundary, 4 ft. 8½ in. gauge	64·61	
	Also third rail for 20 miles, making a gauge of 3 ft. Stirling to Cardston	47·21	
			111·82
Albert Southern	Harvey Branch Junction to Alma, N.B.	16·00	
	Harvey Branch, Albert, to Harvey Bank, N.B.	3·00	
			19·00
Algoma Central and Hudson Bay	Sault Ste. Marie to Chippewa—Main line	69·35	
	Branch—Michipicoten to Helen Mines	10·29	
	" Josephine Junction to Josephine Mine	10·00	
			89·64
Atlantic, Quebec and Western	82 miles under construction		20·00
Baie des Chaleurs in Atlantic and Lake Superior System	Metapedia Station on I.C.R. to Paspebiac, 100 miles		100·00
Bay of Quinté Railway	Deseronto to Bannockburn	76·00	
	" west of Deseronto	2·00	
	Yarker to Sydenham	11·37	
			89·37
Bedlington and Nelson	International boundary at Port Hill to Jct. Can. Pac. Ry. at Creston, and from Jct. with C. P. R. at Sirdar to Kuscomok		23·97
Beersville Coal and Railway Co.	From Adamsville to Mount Carlyle		8·63
Brandon, Saskatchewan and Hudson Bay	International boundary at Bannerman to Brandon, Man.		69·45
Bessemer and Barry's Bay			5·00
British Yukon	White Pass to White Horse Spur, B.C., and Branch to White Horse		90·32
Buctouche and Moncton	Moncton, on Intercolonial Railway, to Buctouche, N.B.		32·00
Brockville, Westport and North Western	Brockville to Westport, Ont.		45·00
Bruce Mines and Algoma	Town of Bruce Mines to Rock Lake Mine		17·28
Canada Atlantic, including Ottawa, Arnprior and Parry Sound Railway, now in Grand Trunk System	City of Ottawa to Junction with Grand Trunk at Lacolle and U. S. boundary. Crosses the St. Lawrence at Coteau by bridge. Connects with Grand Trunk Railway at Coteau and Lacolle, and Ottawa to Depot Harbour, Lake Huron, near Parry Sound		396·41
Central Counties Leased to Canada Atlantic	From Glen Robertson, on Canada Atlantic, to Hawkesbury, Ont.	22·24	
	South Indian, on Canada Atlantic, to Rockland	16·25	
			38·49
Canadian Northern	Port Arthur to Rainy River	286·90	
	International boundary to Winnipeg	108·00	
	Beaver to Edmonton	751·36	
	Branches—Stanley Junction to Gunflint Lake	66·90	
	" Carman Junction to Somerset	78·60	
	" Neepawa Junction to McCreary Junction	70·40	
	" Gilbert Plains Junction to Prince Albert	360·60	
	" Sifton Junction to Winnipegosis	21·20	
	" Emerson to South Junction	72·70	
	" Winnipeg Transfer Track	9·96	
	" Rossburn Junction to Russell	104·20	
	" Greenway to Adelpha	52·10	
	" Arizona Junction to Brandon Junction	77·00	
	" Brandon Junction to Carberry	22·80	

TABLE 1.—Showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.	Distance. Miles.	Total.
Canadian Northern—*Con.*	Branches—Oak Point Junction to Oak Point	60·40	
	" Hartney to Virden	37·40	
	" Battleford to Battleford Junction	8·00	
	" Brandon to Regina	220·02	
	" Edmonton Junction to Mornville	22·90	
	" Edmonton to Stony Plains	21·40	
	" Oakland to Tobogan	17·30	
	" Thunderhill Junction to Provincial boundary	20·10	
			2,490·24
Canada Coals and Railway Co., now Maritime Railway, Coal and Power Co.	Maccan Station, I.C.R., to Joggins Coal Mine	.....	15·00
Canada Southern	Main Line—Windsor, Ont., to Suspension Bridge	226·18	
	Amherstburg Branch—Essex Centre to Amherstburg	16·83	
	St. Clair Branch—St. Clair Junction to Courtwright	62·63	
	Fort Erie Branch—Fort Erie to Welland Junction	17·50	
	Erie and Niagara Branch—Old Fort Erie to Niagara	30·60	
	Oil Springs Branch—Oil Springs to Oil City	5·50	
Leased	Sarnia, Chatham and Erie—Oil City to Petrolia	7·00	
"	Leamington and St. Clair—Comber to Leamington	15·95	
			382·19
Canada Eastern, now included in Intercolonial Railway	Late Northern and Western of New Brunswick		
	Fredericton to Loggieville	125·00	
Canadian Pacific—			
Owned	Main Line—Montreal to Vancouver	.....	2,905·90
	Branches—Coleridge to Crows Nest	214·90	
	" Quebec to St. Martins Junction	159·80	
	" Piles Junction to Grand Piles	26·90	
	" Berthier Junction to Berthier	2·10	
	" Joliette Junction to St. Félix	16·60	
	" Ste. Thérésé Junction to St. Jérome	13·30	
	" Ste. Thérésé to St. Eustache	6·00	
Montreal and Western	" St. Jérome to Labelle	66·90	
	" St. Lin Junction to St. Lin	15·10	
	" Buckingham Stn. to Buckingham Village	3·20	
Brockville and Ottawa Ry.	" Carleton Junction to Brockville	44·90	
	" Sudbury to Sault St. Marie	179·30	
	" Sudbury to Copper Mines	5·60	
	" Dyment to Ottamine	6·90	
	" Molson to Lac du Bonnet	21·50	
	" McGregor to Varcoe	55·50	
	" Whittier Junction to Emerson	63·80	
	" Rugby Junction to Manitou	100·40	
	" Rugby Junction to Gimli	56·10	
	" Rosenfeldt to Gretna	13·80	
	" Rugby Junction to Komarno	45·80	
	" Rudyard to Kaleida	6·50	
	Souris Branch . { Kenmay to Estevan	156·20	
	Souris Branch . { Glenboro' to Souris	46·00	
	Souris Branch . { Deloraine to Napinka	18·60	
	Branches—Schwitzer Junction to Regina	208·20	
	" North Portal to Pasqua	166·30	
	" New Westminster Jct. to New Westminster	8·20	
Lake Temiscamingue Colonization	" Mattawa to Kippewa	47·20	
	" Mission Junction to Sumas	10·00	
	" Revelstoke to Arrow Head	27·40	
	" Vancouver to Coal Harbour	1·20	
	" Three Forks to Sandon	4·30	
	" Wood Bay to Mowbray	25·90	
	" Cranbrook to Kimberly	19·10	
	" Deloraine to Lyleton	37·40	

TABLE 1.—Showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.		Distance. Miles.	Total.
Canadian Pacific—*Con.*				
Lake Témiscamingue Colonization	Branches—Fernie to Fernie Mines		5·60	
	" Kirkella to Wilkie		430·10	
	" Marysville Junction to Marysville		0·90	
	" Crows Nest to Kootenay Landing		182·10	
	" Selkirk Junction to Selkirk		0·90	
	" Wolseley to Reston		122·40	
	" Lauder to Tilston		28·50	
	" Bolton Junction to Romford		226·20	
	" Moosejaw to Outlook		118·50	
	" Stoughton to Weyburn		37·00	
				3,053 10
	Total mileage owned			5,959 00
Lines leased	Atlantic and North-west (in Canada)—			
	South end Lachine Bridge to Maine boundary, Que	181·90		
	Renfrew Jct. to Eganville, Ont	18·80		
			200·70	
	St. Lawrence and Ottawa—			
	Ottawa to Prescott, Ont	51·70		
	Chaudiere Junction to Sussex St., Ottawa	6·60		
			58·30	
	Ontario and Quebec—			
	Montreal (Windsor Sta.) to Toronto Jct	339·00		
	Mile End to Adirondack Jct	10·00		
	St. Luc Jct. to Western Jct	1·70		
	Toronto Jct. to Toronto (Union Station)	4·90		
	Leaside Jct " "	5·30		
	London to Windsor	112·60		
			474·50	
	Credit Valley—			
	Toronto Junction to St. Thomas	116·90		
	Streetsville Junction to Melville Jct	31·60		
	Cataract to Elora	27·30		
			175·80	
	West Ontario Pacific—Woodstock to London		26·70	
	Toronto, Grey and Bruce—			
	Toronto Junction to Owen Sound	116·40		
	Orangeville Junction to Teeswater	67·80		
	Wingham Junction to Wingham	4·60		
	Mount Forest Tank to Mount Forest	1·20		
			190·00	
	Guelph Junction—			
	Guelph Junction on Credit Valley Ry. to Guelph		14·90	
	Montreal and Lake Maskinongé—			
	St. Félix to St. Gabriel de Brandon		11·00	
	Montreal and Ottawa—			
	Vaudreuil to Jct. with Canada Atlantic	86·70		
	Rigaud to Pt. Fortune	6·80		
			93·50	
	Lindsay, Bobcaygeon and Pontypool—			
	Burketon Junction to Bobcaygeon		38·70	
	Toronto, Hamilton and Buffalo—			
	Hamilton Junction to Hamilton		2·70	
	Cap de la Madeleine—			
	From Main Line C. P. R., at Junction with Piles branch to Cap de la Madeleine		2·30	
	New Brunswick—			
	Woodstock to Maine boundary	59·50		
	Newbury Junction to Fredericton	60·70		
	Aroostook Junction to Edmondston	57·10		
			177·30	

TABLE 1.—Showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.	Distance. Miles.	Total.
Canadian Pacific—*Con.* Leased lines	St. John and Maine—		
	Vanceboro to St. John	90·30	
	Fairville to West St. John	3·40	
			93·70
	Fredericton—		
	Fredericton Junction to Fredericton		22·10
	New Brunswick and Canada—		
	McAdam Junction to St. Stephen	33·90	
	Watt Junction to St. Andrews	27·50	
	McAdam Junction to Woodstock	51·10	
	Debec Junction to Maine boundary	5·10	
			117·60
	St. Stephen and Milltown Ry.—		
	St. Stephen to Milltown		4·60
	Tobique Valley—		
	Perth Centre to Plaster Rock		27·50
	Manitoba and Northwestern—		
	Portage la Prairie to Wynyard	312·30	
	Binscarth to Russell	11·30	
	Saskatchewan and Western—Minnedosa to Rapid City	18·20	
			341·80
	Manitoba Southwestern Colonization—		
	Manitou to Deloraine	100·50	
	Rugby Junction to Glenboro'	102·70	
	Elm Creek to Carman	12 20	
			215·40
	Great Northwest Central—		
	Chater to Miniota	71·00	
	Forrest to Lenore	40·70	
			111·70
	British Columbia Southern—		
	Nelson to Proctor	20·40	
	Curzon to Kingsgate	8·50	
			28·90
	Northern Colonization—		
	Labelle to Nominique		23·50
	Shuswap and Okanagan—		
	From Jct with C. P. R. at Sicamous to Lake Okanagan		50·80
	Nakusp and Slocan—		
	Nakusp on Arrow Lake to Three Forks of Carpenter's Creek, B. C.		36·40
	Columbia and Western—		
	Castlegar Junction to Midway	103·20	
	Castlegar Junction to Rossland	29·30	
	Trail to Smelter Junction	2·00	
	Mining Spurs, including Rossland to Le Roi	24·80	
			159·30
	Kootenay and Arrowhead—		
	Lardo to Gerrard		33·20
	Columbia and Kootenay—		
	Nelson to Robson	27·40	
	Spur to mouth of Kootenay River	·80	
	Slocan Junction to Slocan	31·30	
			59·50
	Vancouver and Lulu Island, Vancouver, to Steveston		16·90
	Calgary and Edmonton—		
	Calgary Junction to Strathcona	190·60	
	" to MacLeod Junction	105·20	
	Wetaskiwin to Hardisty	95·00	
	Lacombe to Stettler	49.60	
			440·40

TABLE 1.—Showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.		Distance. Miles.	Total.
Canadian Pacific—*Con.*	Ottawa Northern and Western—			
	Hull to Waltham	77·50		
	Hull Junction to Maniwaki	80·90		
			158·40	
	Tilsonburg, Lake Erie and Pacific—			
	Ingersoll to Port Burwell	33·40		
	Code Junction to Embro	5·00		
			38·40	
Leased lines	Guelph and Goderich—			
	Guelph to Goderich	80·60		
	Linwood Junction to Listowel	16·20		
			96·80	
	Nicola, Kamloops, and Similkameen—			
	Nicola to Spence's Bridge		47·00	
	Walkerton and Lucknow—			
	Walkerton to Saugeen Junction		37·60	
	Georgian Bay and Seaboard—			
	Victoria Harbour to Coldwater		13.30	
	St. Mary's and Western Ontario—			
	Embro to St. Marys		15·70	
	Total mileage leased			3,649·30
	" owned			5,959·00
	" in Can. Pac. system			9,608·30
Canadian Government Rys.	Intercolonial—			
	Halifax to St. Rosalie Junction	796·04		
	Dartmouth Branch	12·00		
	Truro to Sydney	214·27		
	Pt. du Chene to St. John	101·29		
	Indian Town Branch	13·45		
	St. Leonard Junction to Nicolet	14·70		
	River Ouelle Branch	6·19		
	St. Charles Junction to Chaudiere Junction	16·73		
	Dalhousie Branch	6·28		
	Pictou to Oxford Junction	69·39		
	Brown's Point to Stellarton	11·90		
	New Glasgow Junction to Pictou Landing	8·18		
	Pugwash Junction to Pugwash	4·54		
	Fredericton to Loggieville	124·80		
	Sydney Mines Branch	7·07		
	Freight Branches	43·54		
				1,450·37
	Windsor Branch (32 miles) of I.C. Ry. is operated by Dominion Atlantic Ry.			
	Prince Edward Island—			
	Main Line—Tignish to Georgetown	158·60		
	Charlottetown to Murray Harbour	52·30		
	Branch—Mount Stewart to Souris	38·40		
	" Montague Junction to Montague	6·20		
	" Emerald to Cape Traverse	12·90		
				269·33
				1,719·70
Canadian Northern Ontario	Toronto to Parry Sound	145·40		
	Parry Sound Junction to Sellwood	140·30		
	Hawkesbury to South Station	23·58		
	Branches	23·45		
				332·73
Canadian Northern Quebec.	Hawkesbury to River à Pierre	169·00		
	Montfort Junction to Huberdeau	33·00		
	St. Jerome to Montfort Junction	15·20		
	Montreal to Joliette	36·20		
	Branches	13·40		
				266·80

TABLE 1.—Showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.	Distance. Miles.	Total.
Cape Breton Railway	Point Tupper to St. Peters	30·00	
	Terminal at St. Peters	1·00	
			31·00
Caraquet	From Gloucester Junction, Intercolonial Railway, 5 miles south of Bathurst Station, easterly along the south shore of Baie des Chaleurs to Shippigan Harbour, N.B.		68·00
Carillon and Grenville	Carillon to Grenville, Que., connecting at both termini with Ottawa River Navigation Company's steamers (Gauge, 5 ft. 6 in.)		13·00
Central Ontario	Picton to Trenton Junction	32·17	
	Trenton Junction to Coe Hill	72·60	
	Ormsby Junction to Maynooth	35·36	
			140·13
Central Railway of New Brunswick, now New Brunswick Coal and Railway Company	From Norton Station, on the Intercolonial Railway to Chipman	44·66	
	Extension, Chipman to Minto	13·34	
			58·00
Campbellford, Lake Ontario and Western	From Cobourg, Ont., to Junction with Central Ontario Railway, 49 miles under construction.		
Crows Nest Southern	International Boundary to Michel, B.C.		74·18
Cumberland Railway and Coal Company (formerly Spring Hill and Parrsboro')	Spring Hill Junction, Intercolonial Railway, to Spring Hill Coal Mines, N.S., and Parrsboro', on the Bay of Fundy		32·00
	Spring Hill and Oxford Branch, 14 miles from Spring Hill Mines to Oxford Village on the Oxford and New Glasgow Branch, I.C.R., not in operation.		
Dominion Atlantic, comprising Windsor and Annapolis, Yarmouth and Annapolis and Cornwallis Valley and lease of Windsor Branch of Intercolonial and Midland of Nova Scotia	Windsor to Yarmouth	170·78	
	Branches—		
	Wilmot to Torbrook	5·26	
	From Kentville to Kingsport, on Basin of Minas (formerly Cornwallis Valley Railway)	14·15	
	Windsor Branch of I.C.R.—Windsor to Windsor Junction, Intercolonial Railway, 14 miles from Halifax, leased	31·47	
	Windsor to Truro	57·21	
			278·87
Eastern British Columbia	Corbin to McGillivray, B.C.		14·00
Edmonton, Yukon and Pacific	Strathcona to Edmonton		4·50
Elgin and Havelock	From Elgin, County of Albert, N.B., to Petitcodiac Junction with Intercolonial Railway; thence to Havelock in County of King's, N.B.	27·00	
	Havelock to Keith's Mills	1·00	
			28·00
Esquimalt and Nanaimo	Victoria to Wellington, Island of Vancouver		78·00

TABLE 1.—Showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.	Distance. Miles.	Total.
Fredericton and St. Mary's Ry. Bridge, now in Intercolonial Ry.	Over the St. John River, connecting the Fredericton Railway, at Fredericton, with the New Brunswick Railway, and Canada Eastern Ry., at St. Mary's.		
Grand Trunk (owned)—			
Eastern Division			736·36
Northern Division			884·64
Middle Division			1,326·14
			2,947·14
Leased and partly owned	Buffalo and Lake Huron Ry.		
	Fort Erie to Goderich	161·30	
			161·30
	Total mileage owned and leased		3,108·44
St. Clair Tunnel and approaches	Under the St. Clair River, between Sarnia and Port Huron—connecting the Grand Trunk Railway with railroads in State of Michigan. (Length of tunnel between portals 6,000 ft., cylindrical in section with clear inside diameter of 19 ft. 10 inches).		2·25
Grand Trunk Pacific	Under construction, 945 miles track laid		
Gulf Shore	Junction with Caraquet Railway at Pokemouche to Tracadie operated by Caraquet Ry.		16·78
Halifax and South-western, formerly Nova Scotia Southern, including Central Nova Scotia, Halifax and Yarmouth and Middleton and Victoria Beach			
	Halifax to Yarmouth	246·80	
	Mahone Junction to Lunenburg	7·60	
	Bridgewater Junction to Middleton Junction	53·20	
	New Germany Junction to Caledonia	22·21	
	Middleton Junction to Victoria Beach	40·00	
			369·81
Hampton and St. Martin, formerly St. Martin and Upham	From Hampton on Intercolonial Ry. to St. Martin, County of St. John, N.B., on Bay of Fundy		30·00
Hereford	From International Boundary to Lime Ridge, Quebec, connects with Canadian Pacific Railway at Cookshire, Maine Central at International boundary, and with Quebec Central at Dudswell		52·85
Interprovincial Railway, bridge and approaches, now included in Ottawa, Northern & Western	Across the Ottawa River at City of Ottawa	1·40	
Irondale, Bancroft and Ottawa	From Junction with Grand Trunk Railway near Kinmount Station, to Bancroft Station		48·00
Inverness and Richmond, now Inverness Ry. and Coal Co.	Inverness to Point Tupper Junction		61·00
Kaslo and Slocan	From Kaslo to McGuigan, B.C.	23·18	
	Branches	·19	
			23·37
Kent Northern and leased line	Richibucto, N.B., to Kent Jct., Intercolonial Railway		27·00

TABLE 1.—Showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.	Distance. Miles.	Distance. Total.
St. Louis and Richibucto...	Richibucto to St. Louis.....	.....	7·00
Kettle River Valley.....	Grand Forks to Lynch Creek, B.C.....	.....	20·00
Kingston and Pembroke...	Main Line Kingston to Renfrew.....	103·40	
	Glendower Branch—Bedford to Zanesville Mine.....	4·10	
	Robertsville Branch—To Robertsville Mines.....	·90	
	Branches—To Doran's Mills, Charcoal Works McLaren's Mills, Bethlehem Iron Mines, Lavant Mills, Clyde Forks Mills, Wilson's Mine, Carswell's Mills, William's Mine, Cameron Bay.....	1·40	
	(Connects with Grand Trunk at Kingston, Canadian Pacific at Sharbot Lake and at Renfrew.)		
			109·80
Klondyke Mines Railway..	Dawson City to Sulphur Springs.....	.....	31·81
Lenora Mount Sicker.....	Lenora Mines to Crofton, B.C.....	.....	12·00
Lotbinière and Mègantic...	Lyster Station, Grand Trunk, to St. Jean des Chaillons.	.....	30·00
Lake Erie & Detroit River.	Walkerville, Ont., to St. Thomas.....	126·78	
Erie and Huron.....	Rondeau to Sarnia.....	72·03	
			198·81
London and Port Stanley..	London to Port Stanley on Lake Erie.....	.....	23·66
Liverpool and Milton.....	From Liverpool, N.S., to Milton.....	.....	5·75
Manitoulin and North Shore	Sudbury to Gertrude Mines.....	.....	15·83
Maganetawan River.....	Burks Falls, on Grand Trunk Ry., to Maganetawan River.....	.....	1·91
Middleton and Victoria Beach, now included in Halifax and Southwestern system.....	Middleton to Victoria Beach.....	.....	
The Manitoba Ry., formerly— The Northern Pacific & Manitoba, the Winnipeg Transfer Ry., the Portage and Northwestern the Waskada and Northeastern leased to Govt. of Manitoba and operated by the Canadian Northern....	International boundary to Winnipeg, and branches..	.....	350·68
Marmora Ry. and Mining Co., (formerly Ontario, Belmont and Northern).	Central Ontario Junction to Wanston.....	.....	9·60
Midland of Nova Scotia (formerly Stewiack Valley).....	From Windsor to Truro, N.S., *see* Dominion Atlantic Railway.....	.....	
Massawippi Valley.....	From Lennoxville to Vermont boundary, there connecting with Connecticut and Passumpsic Rivers Railway; also connects with Grand Trunk and C. P. R. at Lennoxville.....	31·95	
	Branch—Stanstead Junction to Stanstead.....	3.51	
			35.46
Midland of Manitoba.....	International Boundary to Portage la Prairie..	76·52	
	" " Morden.....	15·25	
			91·77
Montreal and Vermont Jct.	From Junction with Stanstead, Shefford and Chambly Railway, 2½ miles east of St. Johns, P.Q., to Junction with Vermont and Canada Railway, at Vermont boundary; also connects at Stanbridge with Lake Champlain and St. Lawrence Junction Railway....	.....	23·60
Montreal, Portland and Boston, now Montreal & Province Line.....	Junction with Grand Trunk at St. Lambert to Farnham	32·00	
	Marieville to Césaire.....	8·60	
	Farnham to Freligsburgh.....	18·00	
			58·60

TABLE 1.—Showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.	Distance. Miles.	Distance. Total.
Montreal and Atlantic (formerly Southeastern).....	Main Line—Farnham to Richford on International boundary..	43·70	
	Sutton Junction to Drummondville.....	59·20	
		102·90	
	Leased—Lake Champlain and St. Lawrence Junction —Stanbridge to St. Guillaume.....	60·50	
			163·40
	(Connects with Connecticut and Passumpsic, Grand Trunk and Stanstead, Shefford and Chambly Rys.).		
Morrissey, Fernie and Michel.....	From Swinton to Carbonado, B.C., and leased line ..	.....	10·85
Napierville Junction.....	St. Constant Junction to Rouse's Point.....	.....	27·06
Nelson and Fort Sheppard.	From Five Mile Point to Fort Sheppard on International boundary, B.C.....	.....	55·42
New Glasgow Iron, Coal and Railway Company, now Nova Scotia Steel and Coal Co.....	From Ferrona Junction, I.C.R., to Sunny Brae.....	.....	12·50
New Brunswick and Prince Edward Island.....	From Sackville Station, Intercolonial Railway to Cape Tormentine.....	.....	36·00
New Brunswick Southern (formerly Shore Line)...	St. John, N.B., to St. Stephen, N.B.....	.....	82·35
New Westminster Southern	Douglas to South Westminster.....	.....	24·10
Nosbonsing and Nipissing.	From Lake Nosbonsing to Lake Nipissing.....	.....	5·50
Orford Mountain.....	Windsor Mills to Maissonville.....	.....	55·10
Ottawa and New York....	From Ottawa to International boundary near Cornwall.	.....	56·90
Pembroke Southern leased to Canada Atlantic.....	From Pembroke to Golden Lake.....	.....	21·36
Philipsburg Ry. and Quarry Co.....	Stanbridge Station of Canadian Pacific and Central Vermont Railways, to Philipsburg, Missisquoi Co..	.....	6·00
Pontiac and Renfrew.....	From Wyman's Station, on Pontiac Pacific Junction Railway, to Bristol Iron Mines, County Pontiac, Que.	.....	4·25
Princeton Branch of Washington Co., Ry., (U.S.)..	International Boundary near Waring to International boundary near Woodland.....	.....	5·10
Qu'Appelle, Long Lake and Saskatchewan (in Can. Northern System)	From Canadian Pacific Railway at Regina, Northwesterly to Long Lake and Prince Albert.....	.....	255·50
Quebec Bridge and approaches to connect adjacent railways.....	(Across St. Lawrence River at Quebec, under construction 10 miles).		
Quebec and Lake St. John	Quebec to Chambord Junction.	176·00	
	Chambord Junction to Chicoutimi.....	51·00	
	Valcartier to Gosford.....	5·50	
	Chambord Junction to Roberval.....	14 00	
	La Tuque Junction to La Tuque.....	40·00	
			286·50
Quebec Central.....	Main Line—Sherbrooke to Harlaka Junction, Intercolonial Railway 5 miles from Levis, Que.....	138·00	
	Beauce Junction to St. George.....	24·00	
	Tring Megantic—Tring Junction to Megantic.....	60·00	
	(Connects with Grand Trunk, Canadian Pacific and Boston and Maine Rys. at Sherbrooke).		222·00
Quebec and New Brunswick	From Chaudiere Junction to Connors, N.B., 135 miles, 3 miles under construction).		
Quebec, Montmorency and Charlevoix.....	Hedleyville, Parish of St. Roch, Quebec, to Cap Tourmente.....	.....	27·00

TABLE 1.—Showing Location of Railways, &c.—*Continued.*

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Quebec, Montreal and Southern, comprising East Richelieu Valley Railway and United Counties	Noyan Junction to Bellevue Junction	80·82	
And South Shore Railway	From Fortierville to Junction with Grand Trunk at St. Lambert	109·69	
	St. Constant Junction to Napierville Junction	1·40	
			191·91
Red Mountain	From International boundary Line, B.C., to Rossland		9·59
Restigouche and Western, now International of New Brunswick	Campbellton, N.B., to St. Leonard's, 110 miles (30 miles under construction)		80 00
Rutland and Noyan	International Boundary to Noyan Jct		3·39
Stanstead, Shefford and Chambly	From Junction with Montreal and Vermont Junction Railway, near St. John, Que., easterly to Waterloo		43·00
St. John Bridge and Railway Extension, now leased by Canadian Pacific Ry	From St. John to Fairville, crosses St. John River at the Falls by a cantilever steel bridge, and connects Intercolonial Railway with New Brunswick Railway, C.P.R., included in Canadian Pacific System, 2·00 miles.		
St. John Valley and Rivière du Loup	From Fredericton, N.B., to Woodstock, N.B., 66 miles, of which 6 miles are built		
Salisbury and Harvey (formerly Albert Railway)	Salisbury to Albert, N.B		50·00
Schomberg and Aurora	Bond Lake, Ont., to Schomberg		14·40
St. Lawrence and Adirondack	From Jct. with Canada Atlantic near Valleyfield to International boundary	19·92	
	Beauharnois to Junction with Canadian Pacific at Adirondack Junction	12·90	
	Leased—Valleyfield to Beauharnois	13·30	
			46·12
Sydney and Louisburg (Dominion Coal Co.)	Sydney Harbour to Louisburg Harbour	39·31	
	Branches to coal mines	22·43	
	Sydney Junction to Sydney	1·25	
			62·99
Spokane and British Columbia	Carson to Grand Forks		3·70
St. Mary's River, now Alberta Railway and Irrigation Co			
Temiscamingue and Northern Ontario	North Bay to Cochrane	251·40	
	Englehart to Charlton	7·80	
	Cobalt to Kerr Lake	3·90	
	Haileybury to Moore's Cove	1·64	
			264·74
Thousand Islands	Gananoque on St. Lawrence River to Thousand Island Junction		6·33
Témiscouata	Riviere du Loup, Que., to Edmundston, N.B., on the New Brunswick Railway	81·00	
	Branch—Edmundston to Connors, on St. John River	32·00	
			113·00
Tilsonburg, Lake Erie and Pacific	Port Burwell to Ingersoll, now in Can. Pac. Ry.		

TABLE 1.—Showing Location of Railways, &c.—*Concluded.*

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Toronto, Hamilton and Buffalo, including Brantford, Waterloo and Lake Erie	Waterford Jct. with Canada Southern to Welland Junction with Canada Southern—passing through the city of Hamilton	79·88	
	Hamilton to Grand Trunk Junction	0·27	
	Belt Line, Hamilton	3·52	
			83·67
Trans-Canada	From Roberval to Port Simpson across the continent, 60 miles from Roberval, westward under construction.		
Victoria and Sydney	Victoria to Sidney, B.C.		16·26
Victoria Terminal Railway and Ferry	City of Victoria		1·14
Vancouver, Victoria and Eastern	Laurier to Grand Forks	16·47	
	Grand Forks Junction to Phœnix	25·82	
	Grand Forks to Granby Smelter	4·74	
	Midway to International Boundary	28·89	
	Chopaka to Keremoes	18·20	
	International Boundary to Vancouver	35·84	
	Cloverdale to Port Guichon	17·31	
	Cloverdale to Sumas	29·29	
	Burrard Inlet to Line	1·93	
			178·49
Wellington Colliery	Union Bay to Cumberland		10·75
York and Carleton	Junction with Canada Eastern Ry. at Cross Creek Station to Ryan Brook, N.B.		10·50
	Total mileage		24,104.17

TABLE 2.—Summary of Mileage Operated for the

Number.	Name of Railway.	Single Track. Line represented by Capital Stock. Main line.	Branches and spurs.	Line of Proprietary companies.	Line operated under lease.	Line operated under contract &c.	Line operated under trackage rights.	Total mileage operated.
1	Albert Southern	19·00						19·00
2	Alberta Ry. & Irrigation Co.	111·29	·53				1·60	113·42
3	Atlantic & Lake Superior	100·00						100·00
4	Atlantic, Quebec & Western	20·50					1·75	22·25
5	Algoma Central & Hudson Bay	89·64						89·64
6	Bay of Quinté	78·00	11·37				19·00	108·37
7	Bedlington & Nelson	15·30			8·67			23·97
8	Bessemer & Barry's Bay	5·00						5·00
9	Brandon, Sask. & Hudson Bay	69·45						69·45
10	British Yukon	85·80	4·52					90·32
11	Brockville, Westport & Northwestern	45·00						45·00
12	Bruce Mines & Algoma	17·28						17·28
13	Canada Southern	226·18	156·01					382·19
	Canadian Govt. Rys.—							
14	Intercolonial	1,406·83	43·54				40·30	1,490·67
15	Prince Edward Island	150·90	118·43					269·33
16	Canadian Northern	1,146·26	1,345·22		349·44	255·50		3,096·42
17	Canadian Northern, Ontario	309·28	19·75			3·70	3·80	336·53
18	Canadian Northern, Quebec	169·00	97·80					266·80
19	Canadian Pacific	2,905·90	2,750·30	2,457·50	1,310·60	184·00	37·30	9,645·60
20	Cape Breton	31·00						31·00
21	Caraquet	68·00			16·78			84·78
22	Carillon & Grenville	13·00						13·00
23	Central Ontario	140·13				9·60		149·73
24	Crow's Nest Southern	74·18						74·18
25	Cumberland Ry. & Coal Co	32·00						32·00
26	Dominion Atlantic	242·14	5·26		31·47		14·42	293·29
27	Edmonton, Yukon & Pacific (C.N.R.)	4·50						4·50
28	Eastern British Columbia	14·00						14·00
29	Elgin & Havelock	27·00	1·00					28·00
30	Esquimalt & Nanaimo	78·00						78·00
31	Grand Trunk (in Canada)	2,947·14				161·30	13 71	3,122·15
32	Grand Trunk (Canada Atlantic)	396·41			59·85			456·26
33	*Grand Trunk Pacific							
34	Halifax & Southwestern	246·80	123·01				2.30	372·11
35	Hampton & St. Martins	30·00						30·00
36	Hereford	52 85						52·85
37	International of New Brunswick	80·00						80 00
38	Inverness Ry. & Coal Co	61·00						61 00
39	Irondale, Bancroft & Ottawa	48·00						48·00
40	Kalso & Slocan	23·18	·19					23·37
41	Kent Northern	27·00			7·00			34·00
42	Kettle River Valley	20·00						20 00
43	Kingston & Pembroke	103·40	6·40					109·80
44	Klondike Mines	31·81						31·81
45	Lake Erie & Detroit River (Pere Marquette)	198 81					136·78	335·59
46	Liverpool & Milton	5·00	·75					5.75
47	London & Port Stanley	23·66					·42	24·08
48	Lotbinière & Megantic	30·00						30·00
49	Maganetawan River	1·91						1·91
50	Manitoulin & North Shore	12·91	2·92					15·83
51	Maritime Ry. & Coal Co	12·00	3·00					15·00
52	Massawippi Valley	35·46					2·95	38·41
53	Midland of Manitoba	91 77					·99	92·76
54	Montreal & Atlantic	102·90			60·50			163·40
55	Montreal & Province Line	50·00	8·60					58·60
56	Montreal & Vermont Junction	23·60						23·60
57	Morrissey, Fernie & Michel	5 82			5·03			10 85

* Under construction 945 miles; track laid June 30, 1909.

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Year ended June 30, 1909—All Tracks.

			Second Track.							
New line constructed during year.	Rails.		Line represented by Capital Stock.		Lines operated under lease.	Lines operated under trackage rights.	Total Mileage operated.	New line constructed during year.	Rails.	Number.
	Iron.	Steel.	Main line.	Branches and spurs.					Steel.	
		19·00								1
		111·82								2
		100·00								3
		20·50								4
		89·64								5
		89·37								6
		23·97								7
		5·00								8
		69 45								9
		90·32								10
		45·00								11
		17·28								12
		382·19	226·18	16 80			242·98		242·98	13
		1,450·37	16·00			37 60	53·60		16·00	14
		269·33								15
		3,096·42								16
		332·73								17
		266·80								18
		9,608·30	385·10		98·10		483·20		483·20	19
		31·00								20
		84·78								21
		13·00								22
		149·73								23
		74·18								24
		32·00								25
	2·84	276·03								26
		4·50								27
		14·00								28
		28·00								29
		78·00								30
		3,108·44	706·48			706·48			706·48	31
		456·26	·88			·88			·88	32
										33
		369·81								34
		30·00								35
		52·85								36
		80·00								37
		61·00								38
		48·00								39
		23·37								40
		34·00								41
		20·00								42
	6·40	103·40								43
		31 81								44
		198·81								45
		5·75								46
		23·66								47
		30·00								48
		1·91								49
		15·83								50
		15·00								51
		35·46								52
		91·77								53
		163·40	6·40				6·40		6·40	54
		58·60								55
		23·60								56
		10·85								57

TABLE 2.—SUMMARY of Mileage Operated for the

Number.	Name of Railway.	Single Track.						
		Line represented by Capital Stock.		Line of proprietary companies.	Line operated under lease.	Line operated under contract &c.	Line operated under trackage rights.	Total mileage operated.
		Main line.	Branches and Spurs.					
58	Moncton & Buctouche	32·00						32·00
59	Napierville Junction	27·06						27·06
60	Nelson & Fort Sheppard	55·42					5·42	60·84
61	New Brunswick Coal & Ry. Co.	58·00						58·00
62	New Brunswick & Prince Edward Island	36·00						36·00
63	New Brunswick Southern	82·19	·16					82·35
64	New Westminster Southern	24·10					1·48	25·58
65	North Shore	6·13	2·50					8·63
66	Nosbonsing & Nipissing	5·50						5·50
67	Nova Scotia Steel & Coal Co	12·50						12·50
68	Orford Mountain	28·60	26·50					55·10
69	Ottawa & New York	56·90					1·90	58·80
70	Phillipsburg Ry. & Quarry Co	6·00						6·00
71	Pontiac & Renfrew	4·25						4·25
72	Princeton Branch of Washington Co. Ry. U.S.	5·10						5·10
73	Quebec Central	138·00	84·00					222·00
74	Quebec Ry. Light & Power Co.	24·00				3·00		27·00
75	Quebec & Lake St. John	240·00	46·50					286·50
76	Quebec, Montreal & Southern	191·91						191·91
77	Red Mountain	9·59						9·59
78	Rutland & Novan	5·39						3·39
79	Salisbury & Harvey	45·00	5·00					50·00
80	Schomberg & Aurora	14·40						14·40
81	Stanstead, Shefford & Chambly	43·00						43·00
82	St. Clair Tunnel	2·25						2·25
83	St. Lawrence & Adirondack	32·82			13·30		8·92	55·04
84	Sydney & Louisburg	39·00	22·90	1·09			1·20	64·19
85	Spokane & British Columbia				3·70			3·70
86	Temiscouata	113·00						113·00
87	Temiskaming & Northern Ontario	251·40	13·34					264·74
88	Thousand Islands	6·08	·25					6·33
89	Toronto, Hamilton & Buffalo	79·88	3·79				4·36	88·03
90	Vancouver Copper Co	12·00						12·00
91	Vancouver, Victoria & Eastern	178·49					1·48	179·97
92	Victoria & Sydney	16·26						16·26
93	Victoria Terminal Ry. & Ferry Co	1·14						1·14
94	Wellington Colliery Co	10·75						10·75
95	York & Carleton	10·50						10·50
	Final Totals	14,258·60	4,903·54	2,458·59	1,866·34	617·10	300·08	24,404·25

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Year ending June 30, 1909.—All Tracks.—*Continued.*

New line constructed during Year.	Rails.		Second Track. Line represented by Capital Stock.		Lines operated under lease.	Line operated under trackage rights.	Total mileage operated.	New line constructed during year.	Rails.	Number.
	Iron.	Steel.	Main line.	Branches and Spurs.					Steel.	
		32·00								58
		27·06								59
		55·42								60
		58·00								61
		36·00								62
		82·35								63
		24·10								64
		8 63								65
		5·50								66
		12·50								67
		55·10								68
		56·90								69
		6·00								70
		4·25								71
		5·10								72
		222·00								73
		27·00	6·00				6·00		6·00	74
		286 50								75
		191·91								76
		9·59								77
		3·39								78
	30·00	20·00								79
		14·40								80
		43 00								81
		2·25								82
		46·12								83
		62·99								84
		3·70								85
		113·00								86
		264·74								87
		6·33								88
		83·67	2·04				2·04		2·04	89
		12·00								90
		178·49								91
		16·26								92
		1·14								93
		10·75								94
		10 50								95
	39·24	24,064·93	1,349·08	16·80	98·10	37·60	1,501·58		1,463·98	

TABLE 2.—SUMMARY of Mileage operated for

Number.	Name of Railway.	YARD TRACK AND SIDINGS.							
		Line represented by Capital Stock.		Line operated under lease.	Line operated under contract.	Total Mileage operated.	New line constructed during year.	Rails.	
		Main line.	Br'hs and spurs.					Iron	Steel.
1	Albert Southern								
2	Alberta Ry. & Irrigation Co.	11·59				11·59			11·59
3	Atlantic & Lake Superior								
4	Atlantic, Quebec & Western								
5	Algoma Central & Hudson Bay	22·50	9·93			32·43			32·43
6	Bay of Quinté	11·30	4·00			15·30			15·30
7	Bedlington & Nelson	1·28				1·28			1·28
8	Bessemer & Barrys Bay	1·00				1·00			1·00
9	Brandon, Saskatchewan & Hudson Bay	8·32				8·32			8·32
10	British Yukon								
11	Brockville, Westport & Northwestern	2·00				2·00			2·00
12	Bruce Mines & Algoma								
13	Canada Southern	144·65	44.56			189·21			189·21
	Canadian Government Rys.—								
14	Intercolonial	365·74				365·74			365·74
15	Prince Edward Island	11·15	9·10			20·25			20·25
16	Canadian Northern	153·94	88·20	47·04		289·18			289·18
17	Canadian Northern Ontario	23·11				23·11			23·11
18	Canadian Northern Quebec	14.20	12·80			27·00			27·00
19	Canadian Pacific	1,997.10				1,997·10		9·50	1,987·60
20	Cape Breton								
21	Caraquet		3·50			3·50			3·50
22	Carillon & Grenville								
23	Central Ontario	15·50			·50	16·00			16·00
24	Crowsnest Southern	13·90				13·90			13·90
25	Cumberland Ry. & Coal Co	16·00				16·00			16·00
26	Dominion Atlantic	17·56	11·72	3·60		32·88		8·78	24·10
27	Edmonton, Yukon & Pacific (C. N. R)								
28	Eastern British Columbia	2·00				2·00			2·00
29	Elgin & Havelock								
30	Esquimault & Nanaimo								
31	Grand Trunk (in Canada)	1,090·77				1,090·77	13·80		1,090·77
32	Grand Trunk (Canada Atlantic)	100·05		5·29		105·34	5·85		105·34
33	*Grand Trunk Pacific								
34	Halifax & South Western	12·42	5·91			18·33			18·33
35	Hampton & St. Martins								
36	Hereford	8·83				8·83		·83	8·00
37	*International of New Brunswick								
38	Inverness Ry. & Coal Co	4·50				4·50			4·50
39	Irondale, Bancroft & Ottawa	1·00				1·00			1·00
40	Kaslo & Slocan	1·43				1·43			1·43
41	Kent Northern								
42	Kettle River Valley	1·29				1·29			1·29
43	Kingston & Pembroke	23·00	1·00			24·00		24·00	
44	Klondike Mines	2·00				2·00			2·00
45	Lake Erie & Detroit River (Père Marquette)	60·82				60 82			60·82
46	Liverpool & Milton								
47	London & Port Stanley	10·12				10·12			10 12
48	Lotbinière & Megantic	3·00				3·00			3·00
49	Maganetawan River								
50	Manitoulin & North Shore	3·98				3·98			3·98
51	Maritime Ry. & Power Co	3·00				3·00			3·00
52	Massawippi Valley	8·88				8·88			8·88
53	Midland of Manitoba	8 88				8·88			8·88
54	Montreal & Atlantic	35·40				35·40			35·40
55	Montreal & Province Line	2·50				2·50			2·50
56	Montreal & Vermont Junction	2·00				2·00			2·00

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the Year ending June 30, 1909.—All Tracks.

TOTAL MILEAGE OPERATED—ALL TRACKS.

Line Represented by Capital Stock.		Line of proprietary companies.	Line operated under lease.	Line operated under contract &c.	Line operated under trackage rights.	Total mileage operated.	New line constructed during year.	Rails.		Number.
Main line.	Branches and Spurs.							Iron.	Steel.	
19·00						19·00			19·00	1
122·88	·53				1·60	125·01			123·41	2
100·00						100·00			100·00	3
20·50					1.75	22·25			20·50	4
112·14	9·93					122·07			122·07	5
89·30	15·37				19.00	123·67			104·67	6
16·58			8·67			25·25			25·25	7
6·00						6·00			6·00	8
77·77						77·77		8·32	69·45	9
85·80	4·52					90·32			90·32	10
47·00						47·00			47·00	11
17·28						17·28			17·28	12
597·01	217·37					814·38			814·38	13
1,788·57	43·54				77·90	1,910·01			1,832·11	14
162·05	127·53					289·58		8·95	280·63	15
1,300·20	1,433·42		396·48	255·50		3,385·60			3,385·60	16
332·39	19·75			3·70	3·80	359·64			355·84	17
183·20	110·60					293·80			293·80	18
5,288·10	2,750·30	2,457·50	1,408·70	184·00	37·30	12,125·90		9·50	12,079·10	19
31·00						31·00			31·00	20
68·00	3·50		16·78			88·28			88·28	21
13·00						13·00			13·00	22
155·63				10·10		165·73			165·73	23
88·08						88·08			88·08	24
48·00						48·00			48·00	25
259·70	16·98		35·07		14·42	326·17		11·62	300·13	26
4·50						4·50			4·50	27
16·00						16·00			16·00	28
27·00	1·00					28·00			28·00	29
78·00						78·00			78·00	30
4,744·39				161·30	13·71	4,919·40			4,905·69	31
497.34			65·14			562·48			562·48	32
										33
259·22	128·92				2·30	390·44			388·14	34
30·00						30·00			30·00	35
61·68						61·68		·83	60·85	36
80·00						80·00			80·00	37
65·50						65·50			65·50	38
49·00						49·00			49·00	39
24·61	·19					24·80			24·80	40
27·00			7·00			34·00			34·00	41
21·29						21·29			21·29	42
126·40	7·40					133·80		30·40	103·40	43
33·81						33·81			33·81	44
259·63					136·78	396·41			259·63	45
5·00	·75					5·75			5·75	46
33·78					·42	34·20			33·78	47
33·00						33·00			33·00	48
1·91						1·91			1·91	49
16·89	2·92					19·81			19·81	50
15·00	3·00					18·00			18·00	51
44·34					2·95	47·29			44·34	52
100·65					·99	101·64			100·65	53
144·70			60·50			205·20			205·20	54
52·50	8·60					61·10			61·10	55
25·60						25·60			25·60	56

TABLE 2.—Summary of Mileage Operated for

Number.	Name of Railway.	Yard Track and Sidings. Line Represented by Capital Stock. Main line.	B'ches and spurs.	Line operated under lease.	Line operated under contract, etc.	Total mileage operated.	New line constructed during year.	Rails. Iron.	Steel.
57	Morrissey, Fernie & Michel, B.C.								
58	Moncton & Buctouche								
59	Napierville Junction	3·20				3·20			3·20
60	Nelson & Fort Sheppard	3·39				3·39			3·39
61	New Brunswick Coal & Ry. Co	7·00				7·00			7·00
62	New Brunswick & Prince Edward Island	1·50				1·50			1·50
63	New Brunswick Southern	2·87				2·87			2·87
64	New Westminster Southern	1·64				1·64			1·64
65	North Shore	1·37				1·37			1·37
66	Nosbonsing & Nipissing	1·25				1·25			1·25
67	Nova Scotia Steel & Coal Co	1·00				1·00			1·00
68	Orford Mountain	1·00	1·30			2·30			2·30
69	Ottawa & New York	5·81				5·81			5·81
70	Phillipsburg Ry. & Quarry Co.								
71	Pontiac & Renfrew								
72	Princeton Branch of Washington Co. Ry. (U.S.)	·14				·14			·14
73	Quebec Central								
74	Quebec Ry., Light & Power Co.	5·00				5·00			5·00
75	Quebec & Lake St. John	35·41	3·64			39·05			39·05
76	Quebec, Montreal & Southern	23·05				23·05			23·05
77	Red Mountain	3·68				3·68			3·68
78	Rutland & Noyan	·77				·77			·77
79	Salisbury & Harvey								
80	Schomberg & Aurora								
81	Stanstead, Shefford & Chambly	3·23				3·23			3·23
82	St. Clair Tunnel								
83	St. Lawrence & Adirondack	7·15				7·15			7·15
84	Spokane & British Columbia			·20		·20			·20
85	Sydney & Louisburg		41·86			41·86			41·86
86	Temiscouata	5·86	2·74			8·60			8·60
87	Temiskaming & Northern Ontario	67·84	·96			68·80			68·80
88	Thousand Islands	1·00				1·00			1·00
89	Toronto, Hamilton & Buffalo	29·91	2·33			32·24			32·24
90	Vancouver Copper Co								
91	Vancouver, Victoria & Eastern	30·34				30·34			30·34
92	Victoria & Sidney	1·20				1·20			1·20
93	Victoria Terminal Ry. & Ferry Co								
94	Wellington Colliery Co								
95	York & Carleton								
	Total	4,461·32	243·55	56·13	·50	4,761·50		43·11	4,718·39

the year ending June 1908.—All tracks.

TOTAL MILEAGE OPERATED—ALL TRACKS.

Line Represented by Capital Stock.		Line of proprietary companies.	Line operated under lease.	Line operated under contract &c.	Line operated under trackage rights.	Total mileage operated.	New line constructed during year.	Rails.		Number.
Main line.	Branches and Spurs.							Iron.	Steel.	
5·82			5·03			10·85			10·85	57
32·00						32·00			32·00	58
30·26						30·26			30·26	59
58·81					5·42	64·23			58.81	60
65·00						65·00			65·00	61
37·50						37·50			37·50	62
85 06	·16					85·22			85·22	63
25·74					1·48	27·22			25·74	64
7·50	2·56					10·00			10·00	65
6·75						6·75			6·75	66
13·50						13·50			13·50	67
29·60	27·80					57·40			57·40	68
62·71					1·90	64·61			62·71	69
6·00						6·00			6·00	70
4·25						4·25			4·25	71
5·24						5·24			5·24	72
138·00	84·00					222·00			222·00	73
35·00				3 00		38·00			38·00	74
275·41	50·14					325·55			325·55	75
214·96						214·96			214·96	76
13·27						13·27			13·27	77
4·16						4·16			4·19	78
45·00	5·00					50·00		30·00	20·00	79
14·40						14·40			14·40	80
46·23						46·23			46·23	81
2·25						2·25			2·25	82
39·97			13·30		8 92	62·19			53·27	83
			3·90			3·90			3·90	84
39·00	64·76	1·09			1 20	106·05			104·85	85
118·86	2·74					121·60			121·60	86
319·24	14·30					333·54			333 54	87
7·08	·25					7·33			7·33	88
111·83	6·12				4 36	122·31			117·95	89
12·00						12·00			12·00	90
208·83					1·48	210 31			208·83	91
17·46						17·46			17·46	92
1·14						1·14			1·14	93
10·75						10·75			10·75	94
10·50						10·50			10·50	95
20,069·00	5,163·89	2,458·59	2,020·57	617·60	337·68	30,667·33		99·62	30,230·03	

TABLE 3.—SUMMARY of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1909.—Canada.

NOVA SCOTIA.

Number.	Name of Railway.	Mileage owned in Nova Scotia on June 30.		Increase.	Decrease.
		1909.	1908.		
1	Canadian Government Railway—Intercolonial	481·61	483·03		1·42
2	Cape Breton	31·00	31·00		
3	Canada Coal and Ry. Co., now the Maritime Coal and Ry. Co.	15·00	12·00	3·00	
4	Cumberland Ry. and Coal Co.	32·00	32·00		
5	Dominion Atlantic, and	247·40	246·38	1·02	
6	Windsor Branch of Intercolonial Ry.	31·47	32·00		·53
7	Halifax and South Western	369·81	369·81		
8	Inverness Railway and Coal Co	61·00	65·50		*4·50
9	Liverpool and Milton	5·75	5·53	·22	
10	Nova Scotia Steel and Coal Co.'s Railway	12·50	12·50		
11	Sydney and Louisburg Ry. (Dominion Coal Co)	62·99	54·30	8·69	
	Total	1,350·53	1,344·05	12·93	6·45

*Sidings.

PRINCE EDWARD ISLAND.

Number.	Name of Railway.	Mileage owned in Prince Edward Isl'd on June 30.		Increase.	Decrease.
		1909.	1908.		
1	Canadian Government Railway—Prince Edward Island	269·33	267 50	1·83	
	Total	269·33	267·50	1·83	

TABLE 3.—SUMMARY of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1909.—Canada—*Continued.*

NEW BRUNSWICK.

Number.	Name of Railway.	Mileage owned in New Brunswick on June 30.		Increase.	Decrease.
		1909.	1908.		
1	Albert Southern	19·00	19·00		
2	Canadian Government Railway—Intercolonial	504·69	503·80	·89	
3	Canadian Pacific	440·20	440·20		
4	Caraquet and	68·00	68·00		
5	Gulf Shore	16·78	16·78		
6	Elgin and Havelock	28·00	28·00		
7	Hampton and St. Martins	30·00	30·00		
8	International of New Brunswick	80·00	43·00	37·00	
9	Kent Northern, and	27·00	27·00		
10	St. Louis and Richibucto	7 00	7·00		
11	Moncton and Buctouche	32·00	32·00		
12	New Brunswick Coal and Railway Co	58·00	58·00		
13	New Brunswick and Prince Edward Island	36·00	36·00		
14	New Brunswick Southern	82·35	82·35		
15	North Shore (formerly Beersville Ry.)	8·63	8·63		
16	Princeton Branch of Washington Co. Ry. (U.S.)	5·10	5·10		
17	Salisbury and Harvey	50·00	50·00		
18	Temiscouata	44·00	44·00		
19	York and Carleton	10 50	10·50		
	Total	1,547·25	1,509·36	37·89	

TABLE 3.—SUMMARY of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1909.—Canada—*Continued.*

QUEBEC.

Number	Name of Railway.	Mileage owned in Quebec on June 30.		Increase.	Decrease.
		1909	1908		
1	Atlantic & Lake Superior	100·00	100 00		
2	Atlantic, Quebec & Western	20 50	20·00	50	
3	Canadian Government Railway—Intercolonial	464·07	464·39		·32
4	Canadian Pacific	939·80	939·80		
5	Carillon & Grenville	13·00	13·00		
6	Canadian Northern Quebec	266·80	266·80		
7	Grand Trunk	451·40	451·40		
8	Grand Trunk (Canada Atlantic)	66·38	66·38		
9	Hereford	52·85	52·85		
10	Lotbinière & Megantic	30·00	30·00		
11	Massawippi Valley	35·46	35·46		
12	Montreal & Atlantic	163·40	163·40		
13	Montreal & Province Line	58·60	58·60		
14	Montreal & Vermont Junction	23·60	23·60		
15	Napierville Junction	27·06	27·11		·05
16	Orford Mountain	55·10	55·10		
17	Phillipsburg Railway & Quarry Co.	6·00	6·00		
18	Quebec Central	222·00	222·00		
19	Quebec & Lake St. John	286 50	246·50	40·00	
20	Quebec Railway Light & Power Co.	27 00	26.00	1·00	
21	Quebec, Montreal & Southern	191·91	143·75	48·16	
22	Rutland & Noyan	3·39	3·39		
23	Stanstead, Shefford & Chambly	43·00	43·00		
24	St. Lawrence & Adirondack	46·12	46·12		
25	Temiscouata	69·00	69·00		
	Total	3,662·94	3,573·65	89·66	·37

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TABLE 3.—SUMMARY of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1909.—Canada—*Continued.*

ONTARIO.

Number.	Name of Railway.	Mileage owned in Ontario, on June 30.		Increase.	Decrease.
		1909	1908		
1	Algoma Central & Hudson Bay	89·64	89·64		
2	Bay of Quinté	89·37	89·37		
3	Bessemer & Barry's Bay	5·00	5·00		
4	Brockville, Westport & North Western	45·00	45·00		
5	Bruce Mines & Algoma	17·28	17·28		
6	Canada Southern	382 19	382·19		
7	Canadian Northern	353·70	353·70		
8	Canadian Northern Ontario	332·73	146·80	185·93	
9	Canadian Pacific	2,881·50	2,828·70	52·80	
10	Central Ontario & Marmora Ry. & Mining Co	140·13 9·60	140·13 9·60		
11	Grand Trunk	2,657·04	2,657·04		
12	Grand Trunk (Canada Atlantic Division)	389·88	389·88		
13	Irondale, Bancroft & Ottawa	48·00	48·00		
14	Kingston & Pembroke	109·80	109·80		
15	Lake Erie & Detroit River, and London & Port Stanley	198·81 23·66	198·81 23·66		
17	Maganetawan River	1·91	1·91		
18	Manitoulin & North Shore	15·83	13.69	2·14	
19	Nosbonsing & Nipissing	5·50	5·50		
20	Ottawa & New York	56·90	56·90		
21	Pontiac & Renfrew	4·25	4·25		
22	Schomberg & Aurora	14·40	14·40		
23	St. Clair Tunnel & approaches	2·25	2·25		
24	Temiskaming & Northern Ontario	264·74	209.40	55·34	
25	Thousand Islands	6 33	6·33		
26	Toronto, Hamilton & Buffalo	83·67	83·67		
	Total	8,229·11	7,932 90	296·21	

TABLE 3.—SUMMARY of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1909—Canada—*Continued.*

MANITOBA.

Number.	Name of Railway.	Mileage owned in **Manitoba** on June 30.		Increase.	Decrease.
		1909	1908		
1	Brandon, Sask. and Hudson Bay	69·45	69·45		
2	Canadian Northern	1,522·08	1,427·20	94·88	
3	Canadian Pacific	1,522·00	1,522·00		
4	Midland of Manitoba	91·77	92·26		·49
	Total	3,205·30	3,110·91	94·88	·49

SASKATCHEWAN.

Number.	Name of Railway.	Mileage owned in **Saskatchewan** on June 30.		Increase.	Decrease.
		1909.	1908.		
1	Canadian Northern	1,006·44	856·10	150·34	
2	Canadian Pacific	1,624·90	1,225·20	399·70	
	Total	2,631·34	2,081·30	550·04	

ALBERTA.

Number.	Name of Railway.	Mileage owned in **Alberta** on June 30.		Increase.	Decrease.
		1809.	1908.		
1	Alberta Railway and Irrigation Co.	111·82	111·82		
2	Canadian Northern	214·20	214·20		
3	Canadian Pacific	991·00	991·00		
4	Hillcrest Railway, Coal and Coke Co.		1·50		1·50
5	Edmonton, Yukon and Pacific	4·50	4·50		
	Total	1,321·52	1,323·02		1·50

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TABLE 3.—SUMMARY of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1909—Canada—*Concluded.*

BRITISH COLUMBIA.

Number.	Name of Railway.	Mileage owned in **British Columbia** on June 30.		Increase.	Decrease.
		1909.	1908.		
1	Bedlington and Nelson	23·97	23·97		
2	British Yukon	31·22	31 22		
3	Canadian Pacific	1,208·90	1,208·90		
4	Crowsnest Southern	74·18	74·18		
5	Eastern British Columbia	14·00		14·00	
6	Esquimalt and Nanaimo	78·00	78·00		
7	Kaslo and Slocan	23·37	31·73		8·36
8	Kettle River Valley	20·00	3·86	16·14	
9	Morrissey, Fernie and Michel	10·85	10·85		
10	Nelson and Fort Sheppard	55·42	60·12		4·70
11	New Westminster Southern	24·10	24·10		
12	Red Mountain	9·59	9·59		
13	Spokane and British Columbia	3·70		3·70	
14	Vancouver Copper Co's Railway	12·00	12·00		
15	Vancouver, Victoria and Eastern	178·49	126·22	52·27	
16	Victoria and Sydney	16·26	16·26		
17	Victoria Terminal Railway and Ferry Co.	1·14	1·14		
18	Wellington Colliery Co's Railway	10·75	20·69		*9·94
	Total	1,795·94	1,732·83	86·11	23·00

is mileage was shown st year as, Ladysmith Extension.

YUKON TERRITORY.

Number.	Name of Railway.	Mileage owned in **Yukon Territory** on June 30.		Increase.	Decrease.
		1909.	1908.		
1	British Yukon	59·10	59·10		
2	Klondike Mines	31·81	31·81		
	Total	90·91	90·91		

TABLE 4.—AMOUNT of Railway Capital at the

No.	1 NAME OF RAILWAY.	2 STOCKS. Amount Outstanding.	3 STOCKS. Amount per Mile of Line.	4 Proportion to Total Railway Capital. 100 × Col. 2. / Col. 12.	5 FUNDED. Amount Outstanding. Cols. 8+9+10+11	6 FUNDED. Amount per Mile of Line.
		$	$	p. c.	$	$
1	Albert Southern	125,920	7,870	100·00		
2	Harvey Branch	32,500	10,833	100·00		
3	Alberta Ry. & Irrigation Co	812,500	7,266	44·06	1,031,584	9,225
4	Algoma Central & Hudson Bay	10,000,000	81,920	56·49	7,703,763	63,109
5	Atlantic & Lake Superior				1,941,313	19,413
6	*Atlantic, Quebec & Western	600,000			1,461,305	
7	Bay of Quinté	1,395,000	14,940	61·34	880,000	9,424
8	Bedlington & Nelson	1,000,000	65,359	100·00		
9	Bessemer & Barrys Bay	125,000	20,833	100·00		
10	Brandon, Sask. & Hudson Bay	2,100,000	30,238	100·00		
11	*Brandon Transfer	12,600		100·00		
12	British Yukon	2,934,119	30,149	60·00	1,957,460	20·114
13	Brockville, Westport & Northwestern	900,000	20,000	66·66	450,000	10,000
14	Bruce Mines & Algoma	99,000	5,729	33·79	194,000	11,226
15	*Burks Falls & French River	12,500		100.00		
16	Canada Atlantic, (now in Grand Trunk System) including, Ottawa, Arnprior & Parry Sound	7,200,000	18,163	32·99	14,627,628	36,900
17	Central Counties	500,000	12,990	56·81	380,000	9,873
18	Pembroke Southern	178,000	8,334	54·27	150,000	7,022
19	Canada Southern	15,000,000	39,247	42·69	20,130,000	52,670
	Canadian Govt. Rys.:—					
20	Intercolonial					
21	Prince Edward Island					
22	Canadian Northern	30,750,000	12,135	31·34	67,363,478	26,584
23	Canadian Northern Ontario	250,000	760	3·08	7,860,000	23,888
24	Canadian Northern Quebec	7,550,000	28,293	46·39	8,725,511	32,704
25	Canadian Pacific	202,696,666	20,715	54·36	170,182,099	17,392
26	Owned—Canada Central				973,333	3,625
27	Montreal & Western	5,000	75	1 40	353,708	5,287
28	North Shore					
29	Leased—Atlantic & North West	3,416,000	9,877	33·52	6,775,066	19,586
30	British Columbia Southern	172,200	821	12·78	1,175,000	5,600
31	Calgary & Edmonton	1,000,000	2,270	11·26	7,458,894	16,937
32	Cap de la Madeleine	20,000	8,571	100·00		
33	Columbia & Kootenay	25,000	420	2·00	1,277,500	21,470
34	Columbia & Western	1,000,000	6,365	14·94	5,691,000	36,225
35	Fredericton	319,280	14,447	76·17	100,000	4,525
36	Great North West Central	500,000	4,475	26·66	1,375,000	12,309
37	Guelph & Goderich	125,000	1,564	4·92	2,415,000	30,225
38	Guelph Junction	21,000	1,354	10·82	173,000	11,161
39	Kootenay & Arrowhead	1,000,000	30,120	56·18	780,000	23,494
40	Lindsay, Bobycageon & Pontypool	200,000	5,168	28·56	500,000	12,919
41	Manitoba & Northwestern	6,562,500	19,730	58·51	4,655,940	13,990
42	Manitoba & Southwestern Colonization	700,000	3,256	21·04	2,616,000	12.167
43	Montreal & Lake Maskinonge	25,000	2,272	19·99	100,000	9,090
44	Montreal & Ottawa	22,500	240	1·35	1,636,250	17,500
45	Nakusp & Slocan	300,000	8,219	31·67	647,074	17,728
46	New Brunswick	4,780,800	10,858	37·93	7,821,127	17,763
47	New Brunswick & Canada	2,179,867	18,318	92·77	170 000	1,429
48	Nicola, Kamloops & Similkameen	250,000	5,319	17·54	1,175,000	25,000

*Under construction.

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Close of the Year ending June 30, 1909.

7	8	9	10	11	12	13	
DEBT.	DESIGNATION OF FUNDED DEBT.				SUMMARY.		
Proportion to Total Railway Capital. 100 × Col. 5 / Col. 12.	Bonds.	Miscellaneous obligations.	Income Bonds.	Equipment trust obligations.	Total Railway Capital. Cols. 2 + 5	Amount per Mile of Line. Cols. 3 + 6	No.
p. c.	$	$	$	$	$	$	
					125,920	7,870	1
					32,500	10,833	2
55·94	1,031,584				1,844,084	16,491	3
43·51	6,750,000	953,763			17,703,763	145,029	4
100·00	1,941,313				1,941,313	19,413	5
	1,461,305				2,061,305		6
38·66	880,000				2,275,000	24,364	7
					1,000,000	65,359	8
					125,000	20,833	9
					2,100,000	30,238	10
					12,600		11
40·00	1,957,460				4,891,579	50,263	12
33·34	450,000				1,350,000	30,000	13
66·21	194,000				293,000	16,955	14
					12,500		15
67·01	14,627,628				21,827,628	55,063	16
43·19	380,000				880,000	22,863	17
45·73	150,000				328,600	15,356	18
57·31	20,130,000				35,130,000	91,917	19
							20
							21
68·66	50,781,900	6,805,346		9,776,232	98,113,478	38,719	22
96·92	7,860,000				8,110,000	24,648	23
53·61	8,725,511				16,275,511	61,002	24
45·64	168,552,099			1,630,000	372,878,765	38,107	25
100·00	973,333				973,333	3,625	26
98·60	353,708				358,708	5,362	27
							28
66·48	6,775,066				10,191,066	29,463	29
87·22	1,175,000				1,347,200	6,421	30
88·74	7,458,894				8,458,894	19,207	31
					20,000	8,571	32
98·00	1,277,500				1,302,500	21,890	33
85·06	5,691,000				6,691,000	42,596	34
23·83	100,000				419,280	18,972	35
73·34	1,375,000				1,875,000	16,784	36
95·08	2,415,000				2,540,000	31,789	37
89·18	173,000				194,006	12,515	38
43·82	780,000				1,780,000	52,614	39
71·44	500,000				700,000	18,087	40
41·49	4,655,940				11,218,440	33,720	41
78·96	2,616,000				3,316,000	15,423	42
80·01	100,000				125,000	11,362	43
98·65	1,636,250				1,658,750	17,740	44
68·33	647,074				947,074	25,947	45
62·07	7,821,127				12,601,927	28,621	46
7·23	170,000				2,349,867	19,747	47
82·46	1,175,000				1,425,000	30,319	48

TABLE 4.—AMOUNT of Railway Capital at the

No.	1 NAME OF RAILWAY.	2 STOCKS. Amount Out standing.	3 Amoun per Mile of Line.	4 Proportion to Total Railway Capital. 100 × Col. 2 / Col. 12	5 FUNDED Amount Out-standing. Cols. 8+9+10+11	6 Amount per Mile of Line.
		$	$	p. c.	$	$
	Canadian Pacific Ry.—*Con.*					
49	Northern Colonization	300,000	12,765	41·78	418,000	17,787
50	Ontario & Quebec	2,000,000	2,946	9·26	19,502,591	28,871
51	Ottawa Northern & Western	1,300,000	8,207	30·00	3,075,000	19,413
52	Shuswap & Okanagan	750,000	14,763	40·00	1,139,253	22,426
53	St. John Bridge & Ry. Extension	200,000	100,000	61·54	125,000	62,500
54	St. John & Maine	2,654,153	28,296	92·43	216,664	2,310
55	St. Lawrence and Ottawa	789,909	13,549	44·79	973,334	16,695
56	St. Mary's & Western Ontario	250,000	16,393	55·70	198,250	13,000
57	St. Stephen and Milltown	50,000	10,870	100·00		
58	Tilsonburg, Lake Erie and Pacific	400,000	11,976	31·37	875,000	26,197
59	Tobique Valley	29,900	1,068	9·65	280,000	10,000
60	Toronto, Grey and Bruce	785,190	4,127	18·32	3,500,000	18,392
61	Vancouver and Lulu Island	25,000	1,480	8·20	280,000	16,568
62	Walkerton and Lucknow	19,000	504	2·50	740,000	19,628
63	West Ontario Pacific	21,000	789	100·00		
64	Waterloo, Wellesley and Lake Huron	500,000	38,461		426,000	32,769
65	*Central Railway of Canada	526,000		100·00		
66	Cape Breton	1,000,000	32,258	100·00		
67	Caraquet	950,000	13,286	64·44	524,297	7,333
68	Carillon and Grenville	200,000	15,385	100·00		
69	Central Ontario	3,340,000	23,857	76·96	1,000,000	7,143
70	Leased :—Marmora Railway and Mining Co.	115,421	11,542	53·11	100,000	10,000
71	Crowsnest Southern	4,150,000	55,945	100·00		
72	Cumberland Railway and Coal Co.	1,000,000	31,250	100·00		
73	Dominion Atlantic	2,433,333	9,892	31·19	5,388,373	21,815
74	Elgin and Havelock	44,900	1,603	47·30	50,000	1,786
75	Esquimalt and Nanaimo	2,500,600	32,501	100·00		
76	Eastern British Columbia	420,000	30,000	50·00	420,000	30,000
77	*Fort William Terminal	375,000				
78	Grand Trunk (in Canada)	221,092,268	75,019	61·97	135,701,846	46,044
79	Including Buffalo & Lake Huron	2,555,657	15,844	40·74	3,716,955	23,043
80	Great Western					
81	Midland, Ontario					
82	Northern					
83	Wellington, Grey and Bruce					
84	Toronto Belt Line	50,000	3,909	9·76	462,500	36,161
85	Owen Sound Branch				100,000	8,064
86	*Grand Trunk Pacific	24,940,000		28·87	61,451,440	
87	Gulf Shore	6,250	390	100·00		
88	*Ha-Ha Bay	600,000		100·00		
89	Halifax and South Western	1,000,000	2,704	18·72	4,341,954	11,741
90	Hampton and St. Martin's	99,000	3,300	52·38	90,000	3,000
91	Hereford	800,000	15,137	50·00	800,000	15,137
92	*Huron and Ontario	3,000,000		95·24	150,000	
93	*Indian River	15,000		100·00		
94	Inverness Railway and Coal Co.	7,500,000	114,504	78·00	2,115,000	32,290
95	*International of New Brunswick	1,320,000		59·56	896,000	
96	Irondale, Bancroft and Ottawa	52,500	1,114	12·50	374,325	7,798
97	Kaslo and Slocan	1,000,000	42,735	57·15	750,000	32,051
98	Kent Northern, and	75,000	2,777	60·00	50,000	1,851
99	St. Louis and Richibucto	20,000	2,857	100·00		

*Under construction.

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Close of the Year ending June 30, 1909—*Continued.*

7	8	9	10	11	12	13	
DEBT.	DESIGNATION OF FUNDED DEBT.				SUMMARY.		
Proportion to Total Railway Capital. 100 × Col. 5 / Col. 12.	Bonds.	Miscellaneous Obligations.	Income Bonds.	Equipment Trust Obligations	Total Railway Capital. Cols. 2 + 5	Amount per Mile of Line. Cols. 3 + 6	No.
p. c.	$	$	$	$	$	$	
58·22	418,000				718,000	30,552	49
90·74	19,502,591				21,502,591	31,817	50
70·00	3,075,000				4,375,000	27,620	51
60·00	1,139,253				1,889,253	37,189	52
38.46	125,000				325,000	162,500	53
7·57	216,664				2,870,817	30,606	54
55·21	973,334				1,763,243	30,244	55
44·30	198,250				448,250	29,393	56
					50,000	10,870	57
68·63	875,000				1,275,000	38.173	58
90·35	280,000				309,900	11,068	59
81·68	3,500,000				4,285,490	22,519	60
91·80	280,000				305,000	18,048	61
97·50	740,000				759,000	20,132	62
					21,000	789	63
	426,000				926,000	71,230	64
					526,000		65
					1,000,000	32,258	66
35·56	500,000	24,297			1,474,297	20,619	67
					200,000	15,385	68
23·04	1,000,000				4,340,000	31,000	69
46·89	100,000				215,421	21,542	70
					4,150,000	55,945	71
					1,000,000	31,250	72
68·81	4,901,707	486,666			7,821,706	31,707	73
52·70	50,000				94,900	3,389	74
					2,500,000	32,501	75
50·00	420,000				840,000	60,000	76
					375,000		77
38·03	135,701,846				356,794,114	121,064	78
59 26	3,716,955				6,272,612	38,887	79
							80
							81
							82
							83
90·24	462,500				512,500	40,070	84
100·00	100,000				100,000	8,064	85
71·13	61,451,440				86,391,440		36
					6,250	390	87
					600,000		88
81·28	4,341,954				5,341,954	14,445	89
47·62	90,000				189,000	6,300	90
50·00	800,000				1,600,000	30,274	91
4·76	150,000				3,150,000		92
					15,000		93
22·00	2,115,000				9,615,000	146,794	94
40·44	896,000				2,216,000		95
87·50	374,325				426,825	8,912	96
42·85	750,000				1,750,000	74,786	97
40·00	50,000				125,000	4,628	98
					20,000	2,857	99

TABLE 4.—AMOUNT of Railway Capital at the

No.	1	2	3	4	5	6
		STOCK.				FUNDED
	NAME OF RAILWAY.	Amount Out-standing.	Amount per Mile of Line.	Proportion to Total Railway Capital. 100 × Col. 2 / Col. 12.	Amount Out-standing. Cols. 8+9+10+11	Amount per Mile of Line.
		$	$	p. c.	$	$
100	Kettle River Valley	375,000	18,750	46·01	440,000	22,000
101	Kingston and Pembroke	3,393,550	30,907	85·57	572,000	5,209
102	Klondike Mines	1,375,000	44,355	55·76	1,091,250	35,202
103	Lake Erie and Detroit River and	1,400,000	7,042	31·58	3,032,000	15,251
104	London and Port Stanley	1,332,854	56,409	100·00		
105	Liverpool and Milton	30,300	5,501	85·84	5,000	91
106	Lotbinière and Megantic	50,000	1,666	100·00		
107	Maganetawan River	30,000	15,706	100·00		
108	Manitoba (C. N. Ry.)	1,432,200	4,086	20·43	5,576,800	15,911
109	Manitoulin and North Shore	200,000	10,096	33·0	405,000	20,444
110	Maritime Coal and Ry. Co	2,000,000	133,333		526,000	35,066
111	Massawippi Valley	800,000	22,560	100·00		
112	Midland of Manitoba	10,000	108	100·00		
113	Moncton and Buctouche	250,000	7,812	80·65	60,000	1,875
114	Montreal and Atlantic and Lake	3,200,000	31,098	71·34	1,065,000	12,500
115	Champlain & St. Lawrence Jct.	600,000	9,917	61·35	378,000	6,248
116	Montreal and Province Line	1,000,000	17,064	83·33	200,000	4,926
117	Montreal and Vermont Junction	1,000,000	42,372	66·66	500,000	21,186
118	Morrissey, Fernie and Michel	1,163,000	199,828	95·92	52,500	9,020
119	Napierville Junction	600,000	22,173	100·00		
120	Nelson and Fort Sheppard	1,500,000	27,066	53·71	1,293,000	23,331
121	New Brunswick and Prince Ed. I.	214,850	5,968	75 16	71,000	1,972
122	New Brunswick Southern	49,000	581	9·00	500,000	5,931
123	New Brunswick Coal and Ry. Co.	†				
124	New Westminster Southern	600,000	24,896	100·00		
125	North Shore	98,000	11,355	73·68	35,000	4,056
126	Nosbonsing and Nipissing	250,000	45,455	100·00		
127	Nova Scotia Steel & Coal Co.'s Ry.	†				
128	Orford Mountain	50,000	1,042	7·00	702,000	14,625
129	Ottawa and New York	1,000,000	17,575	38·46	1,600,000	28,119
130	*Pacific Northern and Omenica	60,000		100·00		
131	Phillipsburg Ry. and Quarry Co.	124,500	20,750	98·43	2,000	333
132	Pontiac and Renfrew	20,000	4,706	100·00		
133	Père Marquette (in Canada)				5,870,000	29,500
134	Princeton Branch of the Washington Co. Railway (U.S.)	86,950	17,049	50·00	86,950	17,049
135	Qu'Appelle, Long Lake and Saskatchewan (C.N.R.)	201,000	787	3·80	5,083,582	19,896
136	Quebec Central	3,381,603	15,233	36·55	5,868,406	26,434
137	Quebec and Lake St. John (C.N.R.)	4,524,000	15,790	37·00	7,702,960	26,886
138	Quebec Ry. Light and Power Co.	3,250,000	120,000	56·10	2,533,899	93,848
139	Quebec and New Brunswick	387,900		100·00		
140	Quebec, Montreal and Southern	1,000,000	5,211	100·00		
141	Red Mountain	190,600	19,874	46·76	217,000	22,628
142	Rutland and Noyan	100,000	29,498	50·00	100,000	29,499
143	Salisbury and Harvey	150,000	3,333	100·00		
144	Schomberg and Aurora	250,000	17,611	45·90	300,000	20,833
145	Stanstead, Shefford and Chambly	608,750	14,157	46·60	697,461	16,220
146	St. Clair Tunnel and approaches	350,000	155,555	12·28	2,500,000	1,111,111
147	*St. John Valley and River du Loup	34,932		100·00		
148	St. Lawrence and Adirondack	1,230,655	37,497	57·37	914,418	27,862

* Under construction.

† Operated and owned by New Brunswick Commission.

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Close of the Year ending June 30, 1909—*Continued.*

7	8	9	10	11	12	13	
DEBT.	DESIGNATION OF FUNDED DEBT.				SUMMARY.		
Proportion to Total Railway Capital. 100 × Col. 5 / Col. 12.	Bonds.	Miscellaneous Obligations.	Income Bonds.	Equipment Trust Obligations.	Total Railway Capital. Cols. 2 + 5	Amount per Mile of Line. Cols. 3 + 6	No.
p. c.	$	$	$	$	$	$	
53·99	440,000				815,000	40,750	100
14·43	572,000				3,965,550	36,116	101
44·24	935,040	156,210			2,466,250	79,557	102
68·42	3,000,000			32,000	4,432,000	22,293	103
					1,332,854	56,409	104
14·16	5,000				35,300	5,592	105
					50,000	1,666	106
					30,000	15,706	107
79·57	5,576,800				7,009,000	19,997	108
66·94	405,000				605,000	30,540	109
	526,000				2,526,000	168,399	110
					800,000	22,560	111
					10,000	108	112
19·35	60,000				310,000	9,687	113
28·66	1,065,000				4,265,000	43,598	114
38·65	378,000				978,000	16,165	115
16·67	200,000				1,200,000	21,990	116
33·34	500,000				1,500,000	63,558	117
4·08	52,500				1,215,560	208,848	118
					600,000	22,173	119
46·29	1,293,000				2,793,006	50,397	120
24·84	71,000				285,850	7,940	121
91·00	500,000				549,000	6,512	122
					†		123
					600,000	24,896	124
26·32	35,000				133,000	15,411	125
					250,000	45,455	126
					‡		127
93·00	702,000				752,000	15,667	128
61·54	1,325,000		275,000		2,600,000	45,694	129
					60,000		130
1·57	2,000				126,500	21,083	131
					20,000	4,706	132
100·00	5,870,000				5,870,000	29,500	133
50·00	86,950				173,900	34,098	134
96·20	5,083,582				5,284,582	20,683	135
63·45	4,223,473		1,644,933		9,250,009	41,667	136
63·00	4,586,347		3,116,613		12,226,960	42,676	137
43·90	2,500,000	10,000		23,899	5,733,899	213,848	138
					387,900		139
					1,000,000	5,211	140
53·24	217,000				407,600	42,502	141
50·00	100,000				200,000	58,997	142
					150,000	3,333	143
54·10	300,000				550,000	38,444	144
53·40	697,461				1,306,211	30,377	145
87·72	2,500,000				2,850,000	1,266,666	146
					34,932		147
42·63	914,418				2,145,073	65,359	148

‡ General capital of the Nova Scotia Steel Company.

TABLE 4.—AMOUNT of Railway Capital at the

No.	1	2	3	4	5	6
		STOCKS.				FUNDED
	NAME OF RAILWAY.	Amount Out-standing.	Amount per Mile of Line.	Proportion to Total Railway Capital. 100 × Col. 2 / Col. 12.	Amount Out-standing. Cols. 8+9+10+11	Amount per Mile of Line.
		$	$	p. c.	$	$
149	Sydney and Louisburg (Dominion Coal Co.)	†				
150	Temiskaming & Northern Ontario.	‡				
151	Temiscouata..	1,000,000	8,849	24·41	3,096,262	27,401
152	Thousand Islands	60,000	8,185	51·85	58,000	7,913
153	Toronto, Hamilton and Buffalo	2,500,000	28,399	36·90	4,280,000	48,620
154	*Trans-Canada	37,700		100·00		
155	Vancouver Copper Co.'s Railway..				92,466	7,705
156	Vancouver, Victoria and Eastern	50,000	280	100·00		
157	and Vancouver, Westminster and Yukon	3,522,000	234,800	100·00		
158	Victoria and Sidney	223,000	13,714	42·60	300,000	18,450
159	Victoria Terminal Railway and Ferry Co	250	218	100·00		
160	Wellington Colliery Co.'s Railway	2,000,000	186,046	100·00		
161	York and Carleton	34,320	5,968	100·00		
	Final Total	647,534,647			660,946,769	

† General capital of Dominion Coal Company.

close of the Year ending June 30, 1908—*Concluded.*

7	8	9	10	11	Summary.		
Debt.	Designation of Funded Debt.				12	13	
Proportion to Total Railway Capital. 100 × Col. 5	Bonds.	Miscellaneous Obligations.	Income Bonds.	Equipment Trust Obligations.	Total Railway Capital. Cols. 2 + 5	Amount per Mile of Line. Cols. 3 + 6	No.
p. c.	$	$	$	$	$	$	
.....	.....	.....	.....	.....	†	.....	149
.....	.....	.....	.....	.....	†	.....	150
75·59	239,926	.....	2,856,336	.....	4,096,262	36,250	151
48·15	58,000	.....	.....	.....	118,000	16,098	152
63·10	4,280,000	.....	.....	.....	6,780,000	77,019	153
.....	.....	.....	.....	.....	37,700	.....	154
100·00	92,466	.....	.....	.....	92,466	7,705	155
.....	.....	.....	.....	.....	30,000	280	156
.....	.....	.....	.....	.....	3,522,000	234,809	157
57·40	300,000	.....	.....	.....	523,000	32,164	158
.....	.....	.....	.....	.....	250	218	159
.....	.....	.....	.....	.....	2,000,000	186,046	160
.....	.....	.....	.....	.....	34,320	5,968	161
.....	633,155,474	8,436,282	7,892,882	11,462,131	1,308,481,416	.....	

Constructed and operated by Ontario Government Commission.

TABLE 5.—Statement of Aid granted and paid to Railways

Number.	Name of Railway.	By Dominion Government.			Name of Province.	
		Bonus Granted.	Bonus Paid up.	Loan.		Bonus Granted.
		$ cts.	$ cts.	$ cts.		$ cts.
1	Albert Southern	50,460 00	50,460 00		New Brunswick	48,680 00
2	Harvey Branch	5,553 57	5,553 57		"	9,000 00
3	Alberta Ry. & Irrigation Co	148,094 00	148,094 00			
4	Algoma Central & Hudson Bay	1,440,000 00	924,976 00			
5	Atlantic & Lake Superior	828,435 84	828,435 84		Quebec	1,596,390 00
6	Atlantic, Quebec & Western	156,672 00	156,672 00			
7	Bay of Quinté	350,455 25	350,455 25		Ontario	84,000 00
8	Bedlington & Nelson	(Nil)				
9	Brandon, Saskatchewan & Hudson Bay	(Nil)				
10	*Brandon Transfer					
11	British Yukon	(Nil)				
12	Brockville, Westport & Northwestern	140,800 00	140,800 00		Ontario	
13	Bruce Mines & Algoma	53,920 00	53,920 00		"	50,918 00
14	Canada Atlantic (Grand Trunk) including	282,355 20	282,355 20		Ontario Quebec	270,000 00 200,000 00
15	Ottawa, Arnprior & Parry Sound	932,512 00	932,512 00		Ontario	577,326 00
16	Central Counties				"	
17	Pembroke Southern	64,000 00	64,000 00		"	55,500 00
18	Canada Southern, including					
19	Sarnia, Chatham & Erie				"	
20	Leamington & St. Clair	51,200 00	51,200 00		"	147,859 00
	Canadian Gov't. Railways:					
21	Intercolonial, including—					
22	Canada Eastern	374,839 84	374,839 84			
23	Drummond County	423,936 00	423,936 00		Quebec	
24	Fredericton & St. Mary's Bridge	30,000 00	30,000 00			
25	Prince Edward Island					
26	Canadian Northern, includ.	374,606 00	374,606 00			
27	Winnipeg Great Northern					
28	Port Arthur, Duluth & Western	271,200 00	271,200 00		Ontario	255,571 00
29	Ontario & Rainy River	1,534,526 00	1,534,526 00		"	1,072,800 00
30	Canadian Northern Ontario	1,872,960 00	1,872,960 00		" **	**
31	Canadian Northern Quebec	1,789,540 35	1,789,540 35		Quebec	1,194,129 46
32	Canadian Pacific—owned	†10,189,521 00 29,416,346 00	10,189,521 00 29,416,346 00		Manitoba British Columbia	375,377 50 37,500 00
33	Canada Central	1,525,250 00	1,525,250 00		Ontario	1,479,000 00
34	Lake Temiscaming Col'n.	310,335 95	310,335 95		Quebec	350,076 82
35	North Shore	1,500,000 00	1,500,000 00			
36	Montreal & Western	361,270 00	361,270 00		Quebec	472,500 00
37	Quebec, Montreal, Ottawa & Occidental				"	727,000 00
	Canadian Pacific—leased:					
38	Atlantic & Northwest	3,888,800 00	3,888,800 00		"	711,122 02
39	British Columbia South'rn					
40	Calgary & Edmonton					
41	Cap de la Madeleine	7,424 00	7,424 00			
42	Columbia & Kootenay	88,800 00	88,800 00			
43	Columbia & Western					
44	Credit Valley				Ontario	531,000 00
45	Fredericton				New Brunswick	230,000 00
46	Great Northwest Central					
47	Guelph & Goderich				Ontario	
48	Guelph Junction	51,200 00	46,000 00		"	
49	Lindsay, Bobcaygeon & Pontypool	185,173 06	185,173 06		Ontario	52,500 00
50	Manitoba & Northwestern				Manitoba	

*Under construction. **Ontario Government guaranteed bonds, 268 miles at $20,000 per mile.

by Governments and Municipalities to June 30, 1909.

By Provincial Governments.			By Municipalities.			
Bonus Paid up.	Loan.	Subscription to Shares.	Bonus Granted.	Bonus Paid up.	Loan.	Subscription to Shares.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
48,680 00						
9,000 00						
947,199 25			50,500 00	9,000 00		
84,000 00			197,990 43	197,990 43		
			116,000 00	116,000 00		
50,918 00			500 00	500 00		
270,000 00						
200,000 00			154,392 00	152,900 00		32,000 00
577,326 06						
			24,000 00	24,000 00		
55,500 00			20,000 00	20,000 00		
			322,500 00	322,500 00		
147,859 00						
			15,000 00	15,000 00		
255,571 00			40,000 00	40,000 00		
1,072,800 00			50,000 00	50,000 00		
			20,000 00	20,000 00		
1,194,129 46			72,000 00	72,000 00		200,000 00
372,157 50						
37,500 00 †			572,500 00	464,761 29		
1,479,000 00						42,500 00
350,076 82						
472,500 00						
727,000 00	1,176,956 00		25,000 00	25,000 00	771,644 62	
699,192 08						325,000 00
531,000 00			1,085,000 00	1,085,000 00		
230,000 00			80,000 00	80,000 00		
			31,000 00	31,000 00		
						193,000 00
52,500 00			73,000 00	73,000 00		
			215,600 00	215,600 00		

†This amount was paid for, 6,793,014 acres land relinquished by Company.

TABLE 5.—Statement of Aid granted and paid to Railways by

Number.	Name of Railway.	By Dominion Government.			Name of Provinces.	
		Bonus Granted.	Bonus Paid up.	Loan.		Bonus Granted.
		$ cts.	$ cts.	$ cts.		$ cts.
	Canadian Pacific Ry.—*Con.*					
51	Manitoba & Southwestern Colonization				Manitoba	
52	Montreal & Lake Maskinonge	41,280 00	41,280 00		Quebec	87,750 00
53	Montreal & Ottawa	192,000 00	192,000 00		Ontario	100,000 00
					Quebec	182,210 00
54	Nakusp & Slocan	121,600 00	117,760 00		British Columbia	
55	New Brunswick				New Brunswick	76,000 00
56	New Brunswick & Canada				"	575,000 00
57	Nicola, Kamloops & Similkameen	300,800 00	300,800 00			
58	Northern Colonization	202,080 00	202,080 00		Quebec	96,000 00
59	Ontario & Quebec	196,000 00	196,000 00		Ontario	
60	Ottawa Northern & Western	950,000 00	821,009 20		Ontario	50,000 00
					Quebec	1,316,389 15
61	Saskatchewan & Western				Manitoba	
62	Shuswap & Okanagan	163,200 00	163,200 00			
63	St. John Bridge & Ry. Extension			133,900 00	New Brunswick	5,181 81
64	St. John & Maine				"	880,000 00
65	St Lawrence & Ottawa				Ontario	
66	St. Stephen & Milltown	14,848 00	*14,848 00		New Brunswick	13,920 00
67	Tillsonburg, Lake Erie & Pacific	158,871 48	117,431 48		Ontario	38,564 00
68	Tobique Valley	134,016 00	134,016 00		New Brunswick	70,000 00
69	Toronto, Grey & Bruce	14,656 00	14,656 00		Ontario	375,282 00
70	Vancouver & Lulu Island					
71	West Ontario Pacific	60,000 00	60,000 00		Ontario	
72	Cape Breton	192,000 00	182,400 00		Nova Scotia	99,200 00
73	Caraquet	224,000 00	224,000 00		New Brunswick	180,000 00
74	Carillon & Grenville (nil)					
75	Central Ontario	179,466 00	179,466 00		Ontario	263,000 00
76	Colchester Coal & Ry. Co	12,800 00	12,800 00			
77	Crowsnest Southern (nil)					
78	Cumberland Ry. & Coal Co.	44,800 00	39,850 00		Nova Scotia	184,450 00
79	Dominion Atlantic, including—					
80	Windsor & Annapolis	1,193,369 00	1,193,369 00		"	
81	Cornwallis Valley	44,800 00	44,800 00		"	44,800 00
82	Western Counties	500,000 00	500,000 00		"	679,197 45
83	Midland of N. S.	399,060 40	399,060 40		"	185,600 00
84	Eastern British Columbia (nil)					
85	Edmonton, Yukon & Pacific (C.N.R.)	160,000 00	91,200 00			
86	Elgin & Havelock	**82,652 82	**82,652 82		New Brunswick	107,500 00
87	Esquimalt & Nanaimo	750,000 00	750,000 00			
88	Grand Trunk (in Canada) including—			15,142,633 33		
89	Beauharnois Junction	62,400 00	62,400 00		Quebec	179,073 00
90	Brantford, Norfolk & Port Burwell				Ontario	68,000 00
91	Buffalo & Lake Huron				"	
92	Cobourg, Blairton & Marmora				"	18,740 00
93	Grand Trunk, Victoria Jubilee Bridge	500,000 00	500,000 00			
94	Grand Trunk, Georgian Bay & Lake Erie				Ontario	336,000 00
95	Grand Junction, Belleville & North Hastings	21,888 00	21,888 00		"	224,660 00
96	Owen Sound Branch	39,744 00	39,744 00		"	

* Includes $9,635.89 used iron rails. ** Includes loan of used iron rails.

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Governments and Municipalities to June 30, 1909—*Continued.*

By Provincial Governments.			By Municipalities.			
Bonus Paid up.	Loan.	Subscription to Shares.	Bonus Granted.	Bonus Paid up.	Loan.	Subscription to Shares.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
	900,000 00					
87,750 00						
100,000 00						
182,210 00			5,300 00	5,300 00		
	647,074 00					
76,000 00			23,000 00	23,000 00		
575,000 00			47,500 00	47,500 00		
96,000 00						
			52,500 00	52,500 00		
50,000 00			150,000 00	150,000 00		
1,192,672 58			101,000 00	100,000 00		
			10,000 00	10,000 00		
5,181 81						
880,000 00		300,000 00				60,000 00
					300,000 00	90,000 00
13,920 00						
38,564 00			75,000 00	75,000 00		
70,000 00						
375,282 00			988,000 00	969,561 44		
			25,000 00	25,000 00		
99,200 00			10,000 00	10,000 00		
180,000 00						
263,000 00			93,500 00	93,500 00		
173,650 00						
44,800 00			27,685 00	27,685 00		
679,197 45			250,000 00	250,000 00		
183,510 40			36,000 00	36,000 00		
107,500 00			13,000 00	13,000 00		
179,073 60						
68,000 00						
			966,000 00	966,000 00		
18,740 00	26,000 00		113,500 00	113,500 00		
336,000 00			929,000 00	929,000 00		
224,660 00			213,000 00	213,000 00		50,000 00
			85,500 00	85,500 00		

TABLE 5.—STATEMENT of Aid granted and paid to Railways

	Name of Railway.	By Dominion Government.			Name of Province.	
		Bonus Granted.	Bonus Paid up.	Loan.		Bonus Granted.
		$ cts.	$ cts.	$ cts.		$ cts.
	Grand Trunk—*Con.*					
97	Great Western					
98	Hamilton & Northwestern				Ontario	565,020 00
99	London, Huron & Bruce				"	178,630 00
100	Midland Ontario				"	168,350 00
101	Montreal & Champlain Junction	103,600 00	103,600 00		Quebec	150,000 00
102	Northern				Ontario	196,188 00
103	North Simcoe				"	83,300 00
104	Northern Pacific Junction	1,320,000 00	1,320,000 00			
105	South Norfolk	54,400 00	54,400 00		Ontario	
106	Toronto Belt Line					
107	Toronto & Nipissing				Ontario	105,212 00
108	Lake Simcoe Junction				"	53,000 00
109	Victoria				"	312,000 00
110	Waterloo Junction	32,800 00	32,800 00		"	
111	Wellington, Grey & Bruce				"	241,276 00
112	Whitby, Port Perry & Lindsay				"	94,957 59
113	*Grand Trunk Pacific	917,800 96	917,800 96		"	224,999 99
114	Gulf Shore	53,699 20	53,699 20		New Brunswick	41,950 00
115	Halifax & Southwestern, including—	819,874 93	819,874 93		Nova Scotia	3,883,405 00
116	Central of Nova Scotia & Nova Scotia Southern	653,776 00	653,776 00		"	
117	Halifax & Yarmouth	160,000 00	160,000 00		"	156,499 33
118	Middleton & Victoria Beach	125,760 00	125,760 00		"	96,000 00
119	Hampton & St. Martins	†83,612 54	83,612 54		New Brunswick	145,600 00
120	Hereford	170,560 00	170,560 00		Quebec	103,000 00
121	Inverness Ry. & Coal Co.	627,000 00	368,545 97		Nova Scotia	272,000 00
122	Irondale, Bancroft & Ottawa	144,000 00	144,000 00		Ontario	315,000 00
123	* International of New Brunswick	368,257 67	368,257 67		New Brunswick	175,000 00
124	Kaslo & Slocan, B.C. (nil)					
125	Kent Northern and	†58,334 27	58,334 27		New Brunswick	135,000 00
126	St. Louis & Richibucto	22,400 00	22,400 00		"	21,000 00
127	Kettle River Valley	97,771 52	97,771 52			
128	Kingston & Pembroke	48,000 00	48,000 00		Ontario	456,493 00
129	Klondike Mines	197,184 00	197,184 00			
130	L'Assomption (road abandoned)	11,200 00	11,200 00			
131	Lake Erie & Detroit River	571,851 00	571,851 00		Ontario	83,000 00
132	& London & Port Stanley					
133	Lenora Mt. Sicker (Vancouver Copper Co. (nil)				"	
134	Liverpool & Milton (nil)					
135	Lotbinière & Megantic	96,000 00	96,000 00		Quebec	126,994 00
136	Maganetawan River	3,552 00	3,552 00		Ontario	10,000 00
137	Marmora Ry. & Mining Co.	30,720 00	30,720 00		"	19,149 39
138	Manitoba (Canadian Northern Ry.				Manitoba	641,575 25
139	Manitoulin & North Shore	32,000 00	32,000 00			
140	Maritime Coal, Railway & Power Co.	40,700 00	40,700 00		Nova Scotia	39,788 00
141	Massawippi Valley	5,376 00	5,376 00		Quebec	
142	Minudie Coal & Ry. Co.	18,544 00	18,544 00			
143	Montreal & Atlantic, including Lake Champlain				Quebec	444,000 00
144	& St. Lawrence Junct.				"	250,280 00
145	Montreal & Province Line	58,560 00	58,560 00		"	231,122 00

Under construction. † Includes loan of used iron rails.

SESSIONAL PAPER No. 20b

by Governments and Municipalities to June 30, 1909—*Continued.*

By Provincial Governments.			By Municipalities.			
Bonus Paid up.	Loan.	Subscription to Shares.	Bonus Granted.	Bonus Paid up.	Loan.	Subscription to Shares.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
565,020 00			599,805 00	599,805 00		
178,630 00			311,500 00	311,500 00		
168,350 00			144,870 85	144,870 85		
150,000 00			21,774 00	21,774 00		
196,188 00			241,980 00	241,980 00		390,00 00
83,300 00						
			65,000 00	65,000 00		
105,212 00			376,702 59	376,702 59		
53,000 00			100,000 00	100,000 00		
312,000 00			186,000 00	186,000 00		
			47,000 00	47,000 00		
241,276 00			682,000 00	682,000 00		
94,957 59			222,094 93	222,094 93		
224,999 99			150,000 00	150,000 00		
41,950 00						
3,831,939 00						
			88,874 17	88,874 17		
156,499 33			15,338 93	15,338 93		
145,600 00						
84,226 36						
233,000 00			100,000 00	50,000 00		
135,000 00						
175,000 00			5,000 00	5,000 00		
135,000 00						
21,000 00						
456,493 00			509,320 00	509,320 00		
83,000 00			356,500 00	356,500 00	1,332,854 00	414,000 00
126,994 00						
10,000 00						
19,149 39						
641,575 25						
39,788 00						65,000 00
315,891 89						528,000 00
250,280 00			51,000 00	36,000 00		
231,122 00			25,000 00	25,000 00		

TABLE 5.—Statement of Aid granted and Paid to Railways,

Number.	Name of Railway.	By Dominion Government.			Name of Province.	
		Bonus Granted.	Bonus Paid up.	Loan.		Bonus Granted.
		$ cts.	$ cts.	$ cts.		$ cts.
146	Montreal & Vermont Junction ..(nil)					
147	Morrissey, Fernie & Michel ..(nil)					
148	Moncton & Buctouche	102,400 00	101,600 00		New Brunswick.	96,000 00
149	Napierville Junction	173,440 00	173,440 00		Quebec	
150	Nelson & Fort Sheppard ..(nil)					
151	New Brunswick & P.E.I.	113,440 00	113,440 00		New Brunswick.	99,708 90
152	New Brunswick Southern				"	413,000 00
153	New Brunswick Coal & Ry. Co.	190,400 00	190,400 00		"	224,000 00
154	New Westminster Southern ..(nil)					
155	Nosbonsing & Nipissing ..(nil)					
156	North Shore Ry Co	27,616 00	27,616 00		New Brunswick.	16,200 00
157	Nova Scotia Steel & Coal Co's. Ry	40,000 00	39,840 00		Nova Scotia	40,000 00
158	Orford Mountain	192,942 50	192,942 50		Quebec	138,884 92
159	Ottawa & New York	262,384 00	262,384 00		Ontario	35,000 00
160	Philipsburg Ry. & Quarry Co.	23,712 00	23,712 00		Quebec	25,667 00
161	Pontiac & Renfrew	13,600 00	13,600 00		"	17,433 60
162	Princeton Branch of Wash. Co. R'ly ..(nil)					
163	†Quebec Bridge & Ry. Co	374,353 33	374,353 33		Quebec	250,000 00
164	Quebec Central	403,980 69	403,980 69		"	1,076,123 14
165	Quebec & Lake St. John, (C.N.R.)	1,454,695 00	1,233,943 50		"	2,533,000 00
166	Quebec Ry., Light and Power Co.	96,000 00	96,000 00		"	306,945 50
167	†Quebec & New Brunswick	201,600 00			New Brunswick.	45,000 00
168	Quebec, Montreal & Southern, including	232,230 55	232,230 55		Quebec	210,000 00
169	United Counties, East Richelieu Valley	69,952 00	69,952 00		"	115,215 00
170	South Shore	296,998 38	296,998 38		"	276,645 00
171	Red Mountain ..(nil)					
172	Rutland & Noyan ..(nil)					
173	Salisbury & Harvey	29,665 45	‡ 29,391 01		New Brunswick.	455,000 00
174	Schomberg & Aurora	48,000 00	46,144 00			
175	Stanstead, Shefford & Chambly ..(nil)					
176	St. Clair Tunnel	375,000 00	375,000 00			
177	†St. John Valley & Rivière du Loup					
178	St. Lawrence & Adirondack	149,481 60	149,481 60		Quebec	70,400 00
179	St. Mary's & Western Ont.	67,344 00	67,344 00		Ontario	
180	St. Maurice Valley	112,640 00	112,640 00			
181	Sydney & Louisburg (Dom. Coal Co.)	89,600 00	87,808 00		Nova Scotia	87,808 00
182	Temiskaming & Northern Ontario					
183	Temiscouata	645,950 00	645,950 00		Quebec New Brunswick.	362,250 00 66,000 00
184	Thousand Islands	61,200 00	29,840 00		Ontario	
185	Toronto, Hamilton & Buffalo	57,600 00	57,600 00		"	
186	†Trans-Canada					
187	Vancouver, Victoria & Eastern ..(nil)					

† Under construction. ‡ Includes $14,663.45 loan, used iron rails.

by Government and Municipalities to June 30, 1909—*Continued.*

By Provincial Governments.			By Municipalities.			
Bonus Paid Up.	Loan.	Subscription to Shares.	Bonus Granted.	Bonus Paid Up.	Loan.	Subscription to Shares.
$ cts	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
94,500 00						
			10,000 00	10,000 00		
99,708 90						
413,000 00			3,000 00	3,000 00		
224,000 00						
16,200 00						
40,000 00			4,000 00	4,000 00		
138,884 92			3,000 00	3,000 00		
35,000 00			85,000 00	85,000 00		
25,667 00						
17,433 60						
250,000 00			300,000 00	290,817 46		
1,076,123 14			103,000 00	103,000 00		
2,368,816 88			12,000 00	12,000 00		450,000 00
306,945 50						
207,565 09						
115,215 00						
276,645 00			25,000 00	25,000 00		
455,000 00			70,000 00	70,000 00		
70,400 00						
			80,000 00	77,996 39		
82,000 00						
362,250 00			25,000 00	25,000 00		
66,000 00						
			10,000 00	10,000 00		
			268,000 00	265,500 00		

TABLE 5.—STATEMENT of Aid granted and paid to Railways

	Name of Railway.	By Dominion Government.			Name of Province.	
		Bonus Granted.	Bonus Paid up.	Loan.		Bonus Granted
		$ cts.	$ cts.	$ cts.		$ cts.
188	Victoria & Sidney, B.C.				British Columbia	101,635 00
189	Victoria Terminal Ry. & Ferry Co. (nil)					
190	Wellington Colliery Co's. Ry. (nil)					
191	York & Carleton	32,896 00	32,896 00		New Brunswick.	25,247 00
	Final total	78,522,973 15	77,028,080 58	15,576,533 33		34,071,719 88

by Governments and Municipalities to June 30, 1909--*Concluded.*

By Provincial Governments.			By Municipalities.			
Bonus Paid up.	Loan.	Subscription to Shares.	Bonus Granted.	Bonus Paid up.	Loan.	Subscription to Shares.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
101,635 00			152,452 50	152,452 50		
25,247 00						
32,538,496 15	2,750,030 00	300,060 00	12,829,679 55	12,580,824 98	2,404,498 62	2,839,500 00

TABLE 6.—INCOME Account of Railways for the Year ending June 30, 1909, including Comparative Statement of Net Earnings.

Number.	1	3	4	A	5	6	7
	Name of Railway.	Earnings.					Net Earnings.
		Passenger.	Freight.	Other Earnings from Operation.	Total Gross, including other Earnings from Operation. Cols. 3+4+A.	Operating Expenses.	1909. Col. 5—6.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1	Alberta Railway and Irrigation Co	80,991 99	200,588 01	12,698 38	294,278 38	206,477 29	87,801 09
2	Algoma Central and Hudson Bay	17,010 02	229,181 24	58,539 68	304,730 94	225,240 78	79,490 16
3	Atlantic and Lake Superior	31,199 40	59,009 02	3,314 76	93,553 18	93,761 46	-208 28
4	Atlantic, Quebec and Western	6,174 72	10,637 04	14 83	16,826 59	24,055 24	-7,228 65
5	Bay of Quinte	41,163 97	108,020 27	4,468 68	153,652 92	131,688 47	21,964 45
6	Bedlington and Nelson	162 09	1,583 08		1,745 17	5,755 67	-4,010 50
7	Bessemer and Barry's Bay		3,107 80		3,107 80	11,987 67	-8,879 87
8	Brandon, Saskatchewan and Hudson Bay	29,070 96	39,843 93	25 22	68,940 11	92,487 36	-23,547 25
9	British Yukon	81,012 52	239,083 02	6,516 55	326,612 09	131,342 98	195,269 11
10	Brockville, Westport and Northwestern	32,192 98	25,575 54		57,768 52	39,305 42	18,463 10
11	Canada Southern	2,240,967 19	5,492,113 84	33,384 48	7,766,465 51	4,535,993 13	3,230,472 38
12	Canadian Government Railways—Intercolonial	3,004,490 57	5,543,349 67	55,146 27	8,602,986 51	9,052,521 98	-449,535 47
13	" " " Prince Edward Island	166,308 82	155,838 28	937 15	323,084 25	411,146 16	-88,061 91
14	Canadian Northern	2,107,100 82	7,488,670 83	985,996 28	10,581,767 93	6,873,509 08	3,708,258 85
15	Canadian Northern, Ontario	130,601 71	194,733 43	7,218 74	332,553 88	378,214 19	-45,660 31
16	Canadian Northern, Quebec	224,877 60	498,250 06	16,475 68	739,603 34	678,327 22	61,276 12
17	Canadian Pacific	22,374,718 57	46,774,714 79	1,288,991 06	70,438,424 42	49,264,448 98	21,173,975 44
18	Cape Breton	5,319 32	2,606 15	118 40	8,043 87	17,607 18	-9,563 31
19	Caraquet	14,747 80	37,282 64		52,030 44	54,079 24	-2,048 80
20	Carillon and Grenville	1,532 85	78 16	897 60	2,508 61	4,775 53	-2,266 92
21	Central Ontario	84,815 61	163,472 41	19,149 58	267,437 60	145,831 36	121,606 24
22	Crowsnest Southern	19,102 46	157,469 86	1,815 02	178,387 34	237,285 16	-58,897 82
23	Cumberland Railway and Coal Co	18,079 57	86,159 03		104,238 60	50,915 75	53,322 85
24	Dominion Atlantic	388,686 60	405,703 82	2,383 85	796,774 27	498,407 28	298,366 99
25	Elgin and Havelock	3,521 54	10,118 07	5 00	13,644 61	12,924 38	720 23
26	Eastern British Columbia	1,953 65	5,000 93	5 00	6,959 58	12,307 08	-5,347 50

27	Grand Trunk	10,017,218 98	17,662,990 52	343,797 79	28,024,007 29	19,400,064 99	8,623,942 30
28	Grand Trunk (Canada Atlantic)	440,297 31	1,320,882 82	52,765 33	1,813,945 46	1,632,297 98	181,647 48
29	Halifax and Southwestern	188,444 60	181,056 70	3,281 32	372,782 62	357,678 42	15,104 20
30	Hampton and St. Martins	4,784 54	8,175 56	14 31	12,974 41	10,821 87	2,152 54
31	Hereford	18,792 54	45,828 68	248 93	64,870 15	81,164 01	—16,293 86
32	Inverness Railway and Coal Co	23,157 62	162,927 84	1,134 76	187,220 22	115,128 63	72,091 59
33	Irondale, Bancroft and Ottawa	6,716 94	20,241 50		26,958 44	32,977 80	—6,019 36
34	Kaslo and Slocan	3,140 12	13,861 17	9 00	17,010 29	24,656 15	—7,645 86
35	Kent Northern	7,702 17	9,729 23		17,431 40	12,639 00	4,792 40
36	Kettle River Valley	82 45	1,549 18		1,631 63	2,745 07	—1,113 44
37	Kingston and Pembroke	56,103 70	126,856 99	Cr. 3,610 55	179,350 14	150,146 21	29,203 93
38	Klondike Mines	13,481 50	30,926 69	20 00	44,428 19	49,339 83	—4,911 64
39	Liverpool and Milton	444 50	11,414 31		11,858 81	8,080 55	3,778 26
40	Lotbinière and Megantic	5,818 50	24,064 97	3,559 15	33,442 62	29,707 72	3,734 90
41	London and Port Stanley	36,495 21	69,411 31	4,722 25	110,628 77	137,519 29	—26,890 52
42	Manitoulin and North Shore	1,552 15	39,687 09		41,239 24	33,637 06	7,602 18
43	Maritime Coal, Railway and Power Co	7,090 15	36,711 00	85 93	43,887 08	32,646 39	11,240 69
44	Massawippi Valley	69,775 13	108,333 92	620 00	178,729 05	149,267 73	29,461 32
45	Midland Railway Co. of Manitoba	9,760 00	54,875 08	114 77	64,749 85	79,520 94	—14,771 09
46	Montreal and Atlantic	197,177 32	626,154 91	21,764 85	845,097 08	752,267 17	92,829 91
47	Montreal and Province Line	51,214 77	37,373 51	2,021 75	90,610 03	64,291 14	26,318 89
48	Montreal and Vermont Junction	55,335 48	78,687 50	74 45	134,097 43	65,117 54	68,979 89
49	Morrissey, Fernie & Michel	7,952 25	69,330 57		77,282 82	76,286 77	995 05
50	Moncton and Buctouche	9,986 07	17,444 37		27,430 44	22,344 35	5,086 09
51	Napierville Junction	4,381 49	40,498 80	Cr. 1,058 13	13,822 16	30,122 43	13 399 73
52	Nelson and Fort Sheppard	27,506 67	42,098 79	3,463 00	73,068 46	110,091 52	—37,023 06
53	New Brunswick Coal and Railway Co	18,613 23	38,101 60	12,657 31	69,372 14	75,974 48	6,602 34
54	New Brunswick and Prince Edward Island	11,011 83	21,007 45	91 45	32,110 73	26,785 67	5,325 06
55	New Brunswick Southern	19,472 30	21,623 26	306 28	41,401 84	69,286 76	27,884 92
56	New Westminster Southern	51,116 12	41,260 57	276 30	92,652 99	72,281 64	20,371 32
57	Nosbonsing and Nipissing		23,299 60		23,299 60	23,299 60	
58	North Shore Railway Co.	361 38	2,718 79		3,080 17	2,892 51	187 66
59	Nova Scotia Steel and Coal Co	2,248 73	3,527 77		5,776 50	11,268 53	—5,492 03
60	Orford Mountain	7,173 10	22,960 77	116 23	30,250 10	37,996 82	—7,746 72
61	Ottawa and New York	67,204 22	69,260 52	2,946 06	139,410 80	190,930 98	—51,520 18
62	Philipsburg Railway and Quarry Co		4,351 63		4,351 63	247 00	4,104 63
63	Princeton Branch of Washington Co	7,720 82	17,193 94		24,914 76	9,826 67	15,088 69
64	Père Marquette	152,220 65	2,210,490 29	9,444 50	2,372,155 14	1,376,282 07	995,873 37
65	Quebec Central	356,622 21	658,040 67	5,849 46	1,020,482 34	724,918 25	295,564 09
66	Quebec and Lake St. John	258,119 59	362,977 81	10,261 66	631,389 06	553,210 15	78,178 91
67	Quebec Light and Power Co.	11,676 23	40,833 52	4,683 32	57,193 07	41,950 97	15,242 10
68	Quebec, Montreal and Southern	110,833 48	124,290 55	Cr. 190 78	234,933 25	229,310 42	5,622 85
69	Red Mountain	3,917 48	17,831 11	419 65	22,162 27	69,347 29	—47,185 02
70	Rutland and Noyan	8,883 16	3,520 56		12,403 72	9,520 66	2,883 06
71	Salisbury and Harvey	11,917 69	18,768 43	150 69	30,836 81	37,465 95	—6,629 14
72	Schomberg and Aurora						
73	Stanstead, Shefford and Chambly	34,970 81	38,098 37	281 37	73,350 55	69,831 29	3,519 26
74	St. Clair Tunnel		277,052 00	41 00	277,093 00	106,690 84	170,402 16
75	St. Lawrence and Adirondack	174,295 26	247,674 03	263 22	422,232 51	273,490 68	148,741 83
76	Sydney and Louisburg	19,296 57	327,143 35	2,847 88	349,287 80	332,716 66	16,571 14

TABLE 6.—INCOME Account of Railways for the Year ending June 30, 1909, including Comparative Statement of Net Earnings—*Continued.*

Number.	Name of Railway.	Earnings.				Operating Expenses.	Net Earnings.
		Passenger.	Freight.	Other Earnings from Operation.	Total Gross, including other Earnings from Operation. Cols. 3+4+A.		1909. Col. 5–6.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
77	Spokane and British Columbia	58 98	760 70		819 68	1,719 58	—899 90
78	Temiscouata	83,508 32	143,143 58	3,496 29	230,148 19	167,852 41	62,295 78
79	Temiskaming and Northern Ontario	526,459 38	710,070 61	87,599 17	1,324,129 16	771,182 65	552,946 51
80	Thousand Islands	10,819 20	19,957 08	2,195 05	32,971 33	25,270 79	7,700 54
81	Toronto, Hamilton and Buffalo	254,483 01	534,543 11	7,417 03	796,443 15	522,056 73	274,386 42
82	Vancouver, Victoria and Eastern	86,131 82	313,484 68	2,923 14	402,539 64	382,018 18	20,521 46
83	Victoria Terminal Railway and Ferry Co	2,089 11	3,122 21	277 01	5,488 33	5,729 56	—241 23
84	Victoria and Sydney, B. C	20,247 18	22,533 79	146 33	42,927 30	30,327 40	12,599 90
85	Wabash in Canada	595,410 17	1,524,515 88	3,281 95	2,123,208 00	1,645,444 45	477,763 55
86	Wellington Colliery Co	3,353 75	44,111 04		47,464 79	47,464 79	
87	York and Carleton	1,845 00	3,530 00		5,375 00	4,236 00	1,139 00
*	Final Total	45,282,326 27	96,685,076 23	30,889,933 69	145,056,336 19	104,600,084 43	40,456,251 76

TABLE 7.—EARNINGS and Income for the Year ending June 30, 1909.

A.—Operating Revenues.

206—7

Number.	1	2	3	4	5	A	6	7	8
	NAME OF RAILWAY.	REVENUE FROM TRANSPORTATION.							
		Passenger Revenue.	Revenue per Passenger per Mile.	Mail.	Express.	Excess Baggage, Parlour and Chair Car—Revenue and other Items.	Total Passenger Service Train Revenue	Passenger Earnings per Train Mile.	Proportion to Total Earnings. 100 × Col. 6. / Col. 16.
		$ cts.	Cents.	$ cts.	$ cts.	$ cts.	$ cts.	$	p. c.
1	Alberta Railway and Irrigation Co.	73,407 51	3·698	653 57	6,203 88	727 03	80,991 99	1·17514	27·53
2	Algoma Central and Hudson Bay.	16,931 57	3·405			78 45	17,010 02	·48822	5·58
3	Atlantic and Lake Superior	26,527 29	3·503	3,605 76	1,056 52	9 83	31,199 40	·48718	33·35
4	Atlantic, Quebec and Western.	6,155 82	3·094			18 90	6,174 72	·44880	36·69
5	Bay of Quinté.	32,335 43	2·272	6,611 76	2,216 78		41,163 97	·24881	26·78
6	Bedlington and Nelson.	110 65	4·047		49 83	1 61	162 09	·12936	9·28
7	Brandon, Saskatchewan and Hudson Bay.	26,115 82	2·721	1,748 88	780 48	425 78	29,070 96	·66215	42·16
8	British Yukon	73,183 34	9·427	4,500 00	2,400 70	928 48	81,012 52	1·43422	24·81
9	Brockville, Westport and Northwestern.	27,343 60	1·356	3,387 60	979 38	482 40	32,192 98	·56978	55·72
10	Bessemer and Barry's Bay.								
11	Canada Southern	1,795,938 73	2·202	121,329 23	305,526 73	18,172 50	2,240,967 19	1·35543	28·85
12	Canadian Government Railways—Intercolonial	2,512,487 61	1·775	180,518 33	180,526 69	130,957 94	3,004,490 57	·94085	34·92
13	" " P. E. Island	136,167 50	1·755	24,331 90	1,816 27	3,993 15	166,308 82	·49828	51·47
14	Canadian Northern.	1,829,703 25	2·344	74,382 40	109,776 80	93,238 37	2,107,100 82	1·04453	19·91
15	Canadian Northern, Ontario.	118,126 89	2·060	240 27	7,031 22	5,203 33	130,601 71	·42857	39·28
16	Canadian Northern, Quebec	198,745 57	1·054	10,472 90	11,884 15	3,774 98	224,877 60	·77987	30·40
17	Canadian Pacific.	19,617,914 78	1·881	740,068 62	1,680,440 02	336,295 15	22,374,718 57	1·41875	31·77
18	Cape Breton	4,983 60			238 67	92 05	5,319 32		66·12
19	Caraquet	12,215 20		2,532 60			14,747 80		28·34
20	Carillon and Grenville.	1,532 85	3·076				1,532 85	·67791	61·10
21	Central Ontario	71,642 04	1·982	6,638 61	6,534 96		84,815 61	·94240	31·71
22	Crowsnest Southern.	16,974 29	3·785	1,296 00	577 26	254 91	19,102 46	·47646	10 71
23	Cumberland Railway and Coal Co.	13,669 11	2·679	1,114 88	2,487 93	807 65	18,079 57	·29459	17·34
24	Dominion Atlantic.	333,899 89	2·136	13,346 32	27,954 74	13,485 65	388,686 60	·78269	48·80
25	Elgin and Havelock.	2,845 46	2·710			676 08	3,521 54		25·81

TABLE 7.—EARNINGS and Income for the Year ending June 30, 1909—*Concluded.*

A.—Operating Revenues.

Number.	1	2	3	4	5	B	6	7	8
	NAME OF RAILWAY.	REVENUE FROM TRANSPORTATION.							
		Passenger Revenue.	Revenue per Passenger per Mile.	Mail.	Express.	Excess Baggage, Parlour and Chair Car—Revenue and other Items.	Total Passenger Service Train Revenue	Passenger Earnings per Train Mile.	Proportion to Total Earnings. 100 × Col. 6 / Col. 16.
		$ cts.	Cents.	$ cts.	$ cts.	$ cts.	$ cts.	$	p. c.
26	Eastern British Columbia	1,897 40	5·650	56 25			1,953 65	·66181	28·07
27	Grand Trunk	8,413,069 94	1·841	366,750 26	994,111 69	243,287 09	10,017,218 98	1·23376	35·74
28	Grand Trunk (Canada Atlantic)	378,817 36	2·153	23,722 71	22,252 83	15,504 41	440,297 31	·67927	24·27
29	Halifax and Southwestern	160,949 24	2·173	5,780 83	16,509 38	5,205 15	188,444 60	·66749	50·55
30	Hampton and St. Martin's	4,253 04	3·000	413 13	53 37	65 00	4,784 54		36·95
31	Hereford	15,393 03	2·218	2,659 20	559 77	180 54	18,792 54	·34373	28 97
32	Inverness Railway and Coal Co.	21,785 40	2·609		488 01	884 21	23,157 62	·54850	12·37
33	Irondale, Bancroft and Ottawa	5,514 06	2·900	704 25	498 63		6,716 94	·21459	24·90
34	Kaslo and Slocan	2,510 23	6·410	471 94	155 75	2 20	3,140 12	·43692	18·45
35	Kent Northern	6,576 59		676 08	449 50		7,702 17		44·18
36	Kettle River Valley	82 45	3·962				82 45	·3962	5·08
37	Kingston and Pembroke	45,685 49	3·245	7,208 98	2,585 38	623 85	56,103 70	·38866	31·28
38	Klondike Mines	13,361 50	14·590	120 00			13,481 50	1·35902	30 34
39	Liverpool and Milton	444 50	2·116				444 50	·8715	3·75
40	Lotbinière and Megantic	4,424 10	2·544	1,394 40			5,818 50	·30785	17·42
41	London and Port Stanley	30,423 69	1·134	1,552 70	3,852 23	666 59	36,495 21	·45046	32 98
42	Manitoulin and North Shore	1,552 15	4·641				1,552 15	·23270	3·76
43	Maritime Coal, Railway and Power Co.	6,272 13	3·210	300 48	371 97	145 57	7,090 15	·38379	16·15
44	Massawippi Valley	65,435 04	2·212	2,851 94	999 96	488 19	69,775 13	·83282	39·04
45	Midland Railway Co. of Manitoba	8,585 37	2·348	460 13	532 63	181 87	9,760 00	·29909	15·07
46	Montreal and Atlantic	169,929 99	2·274	9,963 42	14,125 19	3,158 72	197,177 32	·66209	
47	Montreal and Province Line	44,910 18	1·908	2,297 93	2,885 17	1,121 49	51,214 77	·74036	56·52
48	Montreal and Vermont Junction	47,848 32	1·862	2,522 98	4,547 66	416 52	55,335 48	·66209	41·26
49	Morrissey, Fernie and Michel	7,952 25	1·158				7,952 25	·30612	10·29

50	Moncton and Buctouche	8,888 85	2·076	801 28	40 31	255 63	9,986 07	·44966	33·59
51	Napierville Junction	4,043 45	2·800		317 76	20 28	4,381 49	·25236	10·00
52	Nelson and Fort Sheppard	21,778 17	3·562	1,483 20	2,821 95	1,423 35	27,506 67	·74302	37·64
53	New Brunswick Coal and Railway Co.	16,704 44	2·838	1,281 20	627 59		18,613 23	·29122	26·83
54	New Brunswick and Prince Edward Island	9,306 65	2·261	1,490 44	214 74		11,011 83	·37391	34·29
55	New Brunswick Southern	16,415 72	2·391	2,139 86	916 22	0 50	19,472 30	·37214	47·03
56	New Westminster Southern	45,213 53	3·183	2,163 92	1,577 56	2,161 11	51,116 12	1·11080	55·17
57	Nosbonsing and Nipissing								
58	North Shore Railway Co	361 38	2·499				361 38	·03764	11 75
59	Nova Scotia Steel and Coal Co	1,936 73	2·940	312 00			2,248 73	·14369	38·93
60	Orford Mountain	6,229 00	2·555	375 84	276 84	291 42	7,173 10	·13786	23·71
61	Ottawa and New York	59,320 34	2·193	4,259 81	2,714 01	910 06	67,204 22	·87495	48·26
62	Philipsburg Railway and Quarry Co								
63	Princeton Branch of Washington Co	7,076 65	1·768	218 04	377 08	49 05	7,720 82	·76466	30·98
64	Père Marquette	122,825 68	2·025	8,310 95	18,252 19	2,831 83	152,220 65	·54395	6·41
65	Quebec Central	319,179 86	2·117	18,863 68	12,828 97	5,749 70	356,622 21	·80353	34·94
66	Quebec and Lake St. John	222,987 11	1·888	15,394 00	11,965 94	7,802 54	258,149 59	.97304	40·88
67	Quebec Railway, Light and Power Co	11,676 23	2·000				11,676 23	1·53251	20·41
68	Quebec, Montreal and Southern	99,630 35	2·360	5,091 94	4,520 40	1,590 79	110,833 48	·54439	47·17
69	Red Mountain	2,902 13	3·473	292 00	510 21	213 14	3,917 48	·58400	17·73
70	Rutland and Noyan	8,645 80	2·219	87 36	150 00		8,883 16	1·89487	71·61
71	Salisbury and Harvey	9,079 10	2·806	2,376 48	317 72	144 39	11,917 69	·32109	38·64
72	Schomberg and Aurora								
73	Stanstead, Shefford and Chambly	27,480 40	2·287	1,732 48	4,858 74	899 19	34,970 81	·56047	47·67
74	St. Clair Tunnel								
75	St. Lawrence and Adirondack	163,423 81	1·732	2,490 16	7,219 45	1,161 84	174,295 26	1·12916	41·27
76	Sydney and Louisburg	15,964 22	2·362	1,082 60	1,485 10	764 65	19,296 57	·57239	5·52
77	Spokane and British Columbia	58 98	2·519				58 98	·14491	7·20
78	Temiscouata	74,264 06	2·606	5,687 57	1,999 97	1,556 72	83,508 32	·57854	36·28
79	Temiskaming and Northern Ontario	487,439 74	2·463	11,242 18	24,264 19	3,513 27	526,459 38	1·83160	39·75
80	Thousand Islands	7,712 02	4·124	554 30	2,552 88		10,819 20	·32138	32·81
81	Toronto, Hamilton and Buffalo	238,109 11	2·011	3,248 74	11,400 00	1,725 16	254,483 01	·99046	31·95
82	Vancouver, Victoria and Eastern	75,490 78	3·118	3,374 14	3,733 33	3,533 57	86,131 82	·77844	21·39
83	Victoria Terminal Railway and Ferry Co	2,057 08	2·317	32 03			2,089 11	·90969	38·08
84	Victoria and Sidney, B. C	19,822 65	2·637	425 13			20,247 18	1·32642	47·16
85	Wabash Railroad Co. in Canada	556,135 42	1·600	1,402 40	31,540 68	6,331 67	595,410 17	·85613	28·04
86	Wellington Colliery Co	3,093 75	5·339	260 00			3,353 75	·10749	7·06
87	York and Carleton	1,600 00	2·848	20 00	225 00		1,845 00	·21731	34 32
	Final total	39,073,488 84		1,723,180 97	3,561,170 96	921,485 50	45,282,326 27		

TABLE 7.—EARNINGS and Income for the Year ending June 30, 1909—*Continued.*

A.—Operating Revenues.

Number.	1	9	10	B	11	12	13	14	15	16	17
	NAME OF RAILWAY.	REVENUE FROM TRANSPORTATION.						REVENUE FROM OPERATIONS OTHER THAN TRANSPORTATIONS.		SUMMARY OF REVENUES.	
		Freight Revenue.	Revenue per Ton per Mile.	Switching Revenue, Special Service, Train Revenue and Miscellaneous.	Total Revenue from Transportation.	Freight Earnings per Train Mile.	Proportion to Total Earnings. 100×Col. 9+B / Col. 16.	Station and Train Privileges, Storage and Car Service.	Telegraph, Rents and other Sources.	Total Operating Revenues. Cols. 11+14+15.	Total Earnings per Train Mile.
		$ cts.	Cents.	$ cts.	$ cts.	$ cts.	p. c.	$ cts.	$ cts.	$ cts.	$ cts.
1	Alberta Railway and Irrigation Co.	19,909 01	2·700	1,498 00	281,580 00	2·28335	68·16	352 60	12,345 78	294,278 38	3·37506
2	Algoma Central and Hudson Bay..	138,534 21	1·669	90,647 03	246,191 26	3·19815	75·21	16,566 37	41,973 31	304,730 94	6·74761
3	Atlantic and Lake Superior..	59,009 02	4·330	.....	90,208 42	·68503	63·06	.....	3,344 76	93,553 18	·97817
4	Atlantic, Quebec and Western.....	9,690 94	4·451	946 10	16,811 76	·77315	63·21	14 83	.....	16,826 59	1·15742
5	Bay of Quinté.....	108,020 27	2·499	.....	149,184 24	·65293	70·30	1,826 00	2,642 68	153,652 92	·92876
6	Bedlington and Nelson.....	1,583 08	9 132	.....	1,745 17	1·25841	90·72	.....	.....	1,745 17	1·38725
7	Brandon, Saskatchewan and Hudson Bay.....	239,083 02	11·196	.....	320,095 54	4·21663	73·20	156 65	6,359 90	326,612 09	5·70541
8	British Yukon.....	25,575 54	3·890	.....	57,768 52	·84017	44·28	.....	.....	57,768 52	.....
9	Bessemer and Barry's Bay.....	39,471 33	1·347	372 60	68,914 89	1·61206	57·79	25 22	.....	68,940 11	1·00497
10	Brockville, Westport and Northwestern.....	3,107 80	2·908	.....	3,107 80	.....	100·00	.....	.....	3,107 80	6·17966
11	Canada Southern.....	5,432,730 84	5·45	59,383 00	7,733,081 03	2·70225	70·16	30,084 88	3,299 60	7,766,465 51	2·18313
	Canada Government Railways—										
12	Intercolonial.....	5,491,237 76	5·75	52,111 91	8,547,840 24	1·36651	64·44	34,601 09	20,545 18	8,602,986 51	1·27224
13	Prince Edward Island.....	152,495 86	3·922	3,342 42	322,147 10	·45690	48·23	669 26	267 89	323,084 25	96800
14	Canadian Northern.....	7,370,376 28	7·36	118,294 55	9,595,771 65	·246189	70·69	20,156 37	965,839 91	10,581,767 93	2·32600
15	Canadian Northern, Ontario.....	194,049 85	1·112	683 58	325,335 14	1·42844	58·56	706 48	6,512 26	332,553 88	·80489
16	Canadian Northern, Quebec.....	489,665 31	1·250	8,584 75	723,127 66	2·17511	67·32	4,698 42	11,777 26	739,603 34	1·59833
17	Canadian Pacific..	46,502,875 28	7.66	271,839 51	69,149,433 36	2·30700	66·40	219,455 64	1,069,535 42	70,438,424 42	2·06466
18	Cape Breton..	2,606 15	.. ...	....	7,925 47	.....	32·39	118 40	.....	8,043 87	4·11872
19	Caraquet.....	37,282 64	... .	.....	52,030 44	.....	71·66	.....	.....	52,030 44	.....
20	Carillon and Grenville.....	78 16	....	.....	1,611 01	·03099	3·11	897 60	.....	2,508 61	·63878
21	Central Ontario.....	163,472 41	2·436	.....	248,288 02	·26219	61·12	.....	19,149 58	267,437 60	·29707
22	Crowsnest Southern.....	157,025 49	1·157	444 37	176,572 32	3·53065	88·28	670·91	1,144 11	178,387 34	2·10800

CORRECTION.

Through the displacement of decimal points in the second column of Table 7, on pages 100, 101 and 102, the revenue per ton per mile was changed in the case of fourteen railways. The correct figures with regard to the lines affected are as follows:—

No.	RAILWAY.	Revenue per ton per mile.
11	Canada Southern	.545
12	Intercolonial	.575
14	Canadian Northern	.736
17	Canadian Pacific	.766
27	Grand Trunk	.666
28	do Canada Atlantic	.577
41	London & Port Stanley	.818
44	Massawippi Valley	.971
48	Montreal & Vermont Junction	.331
51	Napierville Junction	.940
64	Pere Marquette	.519
70	Rutland & Noyan	.745
76	Sydney & Louisburg	.617
85	Wabash (in Canada)	.528

J. L. PAYNE,
Comptroller of Statistics.

23	Cumberland Ry. and Coal Co.	86,159	03	1·376		104,238	60	1·40183	82·66				104,238	60	
24	Dominion Atlantic	405,544	32	2·424	159	50	794,390	42	1·63524	50·92	1,163	31	1,220	54	796,774	27	1·43335
25	Elgin and Havelock	10,118	07				13,639	61		74·15			5	00	13,644	61	
26	Eastern British Columbia	4,725	93	2·242	275	00	6,954	58	1·60092	71·86	5	00			6,959	58	2·35758
27	Grand Trunk	17,454,561	79	6·66	208,428	73	27,680,209	50	1·91133	63·02	95,198	70	248,599	09	28,024,007	29	1·67006
28	Grand Trunk (Canada Atlantic)	1,301,246	60	5·77	19,636	22	1,761,180	13	1·71278	72·80	9,196	52	43,568	81	1,813,945	46	1·42478
29	Halifax and Southwestern	177,132	20	1·771	3,924	50	369,501	30	·71550	48·60	779	14	2,502	18	372,782	62	1·20256
30	Hampton and St. Martin's	8,017	94	3·412	157	62	12,960	10		63·02			14	31	12,974	41	
31	Hereford	45,329	18	1·404	499	50	64,621	22	1·10282	70·64	140	39	108	54	64,870	15	·86824
32	Inverness Railway and Coal Co.	162,927	84	1·095			186,085	46	1·67238	87·02	118	66	1,016	10	187,220	22	1 92296
33	Irondale, Bancroft and Ottawa	20,241	50	2·228			26,958	44	·64669	75·10					26,958	44	·86129
24	Kaslo and Slocan	13,826	17	6·413	35	00	17,001	29	1·92377	81·48	9	00			17,010	29	2·36681
35	Kent Northern	9,729	23				17,431	40		55·82					17,431	40	
36	Kettle River Valley	1,549	18	5·306			1,631	63	1·84646	94·92					1,631	63	1·94827
37	Kingston and Pembroke	108,082	48	2·168	18,774	51	182,960	69	1·10800	77·31	Cr. 3,610	55			179,350	14	1·22964
38	Klondike Mines	30,926	69	37·367			44,408	19	3·11761	69·62			20	00	44,428	19	4·47864
39	Liverpool and Milton	11,414	31	7·370			11,858	81	2·23810	96·25					11,858	81	2·32525
40	Lotbinière and Megantic	24,064	97	3·695			29,883	47	1·27327	71·95	532	00	3,027	15	33,442	62	1·67380
41	London and Port Stanley	62,905	71	8·18	6,505	60	105,906	52	1·11666	61·83	4,438	83	283	42	110,628	77	1·96380
42	Manitoulin and North Shore	38,720	28	2·128	966	81	41,239	24	3·00477	96·24					41,239	24	3·02074
43	Maritime Coal, Ry. and Power Co.	36,711	00	3·687			43,801	15	1·46979	83·65			85	93	43,887	08	1·75709
44	Massawippi Valley	107,065	28	9·71	1,268	64	178,109	05	1·30838	60·61	369	58	250	42	178,729	05	1·10216
45	Midland Ry. Co. of Manitoba	54,867	08	1·017	8	00	64,635	08	1·49352	84·75	50	77	64	00	64,749	85	1·75123
46	Montreal and Atlantic	620,838	55	1·158	5,316	36	823,332	23	1·50497		12,732	60	9,032	25	845,097	08	1·52846
47	Montreal and Province Line	37,367	51	2·193	6	00	88,588	28	·90853	41·24	501	01	1,520	74	90,610	03	·96179
48	Montreal and Vermont Junction	78,477	77	3·31	209	73	134,022	98	2·52300	58·65	22	00	52	45	134,097	43	1·40084
49	Morrissey, Fernie and Michel	63,519	62	2·650	5,810	95	77,282	82	2·66891	89·71					77,282	82	2·97504
50	Moncton and Buctouche	17,444	37	3·148			27,430	44	·78549	66·41					27,430	44	1·23516
51	Napierville Junction	40,284	80	9·40	214	00	44,880	29	2·00528	92·40	23	51	Cr. 1,081	64	43,822	16	2·12132
52	Nelson and Fort Sheppard	42,013	79	3·004	85	00	69,605	46	2·30387	57·61	293	90	3,169	10	73,068	46	1·32129
53	New Brunswick Coal and Ry. Co.	38,101	60	1·476			56,714	83	·59613	54·92			12,657	31	69,372	14	1·08539
54	New Brunswick and P. E. Island	21,007	45	4·344			32,019	28	·47891	65·42			91	45	32,110	73	·66605
55	New Brunswick Southern	21,623	26	3·114			41,095	56	·28047	52·22	7	91	298	37	41,401	84	·53703
56	New Westminster Southern	40,882	19	3·012	378	38	92,376	69	2·46685	44·53	152	30	124	00	92,652	99	1·60546
57	Nosbonsing and Nipissing	23,299	60	25·973			23,299	60	2·85709	100·00					23,299	60	2·85709
58	North Shore Ry. Co.	2,718	79	5·003			3,080	17	·28320	88·25					3,080	17	·21390
59	Nova Scotia Steel and Coal Co.	3,527	77	1·412			5,776	50	·22542	61 07					5,776	50	·36910
60	Orford Mountain	22,869	77	3·344	91	00	30,133	87	·79052	75·90	116	23			30,350	10	·57106
61	Ottawa and New York	69,152	35	1·695	108	17	136,464	74	1·77509	49·68	1,092	22	1,853	84	139,410	80	1·20361
62	Philipsburg Ry. and Quarry Co.	4,351	63	2·817			4,351	63	1·38410	100·00					4,351	63	1·38410
63	Princeton Branch of Washington Co.	17,193	94	2·239			24,914	76	2·68194	69·02					24,914	76	2·44669
64	Père Marquette	2,189,286	86	5·19	21,203	43	2,362,710	94	2·16793	93·18	4,502	94	4,941	56	2,372,155	44	1·83624
65	Quebec Central	658,010	67	1·406			1,014,632	88	2·14500	64·48	2,367	54	3,481	92	1,020,482	34	1·64528
66	Quebec and Lake St. John	359,753	52	1·628	3,224	29	621,127	40	1·71766	57·49	2,571	14	7,690	52	631,389	06	1·45673
67	Quebec Ry. Light and Power Co.	40,646	52	2·228	187	00	52,509	75	2·08579	71·40	366	85	4,316	47	57,193	07	2·12463
68	Quebec, Montreal and Southern	122,914	62	1·154	1,375	93	235,124	03	·82280	52·90	404	27	Cr. 595	05	234,933	25	1·11803
69	Red Mountain	17,243	14	2·331	591	00	21,751	62	1·19965	80 47			410	65	22,162	27	1·47709
70	Rutland and Noyan	3,520	56	7·45			12,403	72	1·61864	28·39					12,403	72	1·82190
71	Salisbury and Harvey	18,768	43	4·252			30,686	12	·50566	60·86			150	69	30,836	81	·83082
72	Schomberg and Aurora																

TABLE 7.—EARNINGS and Income for the Year ending June 30, 1909—*Concluded.*

A.—Operating Revenues.

Number.	1	9	10	B	11	12	13	14	15	16	17
		REVENUE FROM TRANSPORTATION.						REVENUE FROM OPERATION OTHER THAN TRANSPORTATION.		SUMMARY OF REVENUES.	
	NAME OF RAILWAY.	Freight Revenue.	Revenue per Ton per Mile.	Switching Revenue, Special Service, Train Revenue and Miscellaneous.	Total Revenue from Transportation.	Freight Earnings per Train Mile.	Proportion to Total Earnings. 100xCol. 9+B / Col. 16.	Station and Train Privileges, Storage and Car Service.	Telegraph, Rents and other Sources.	Total Operating Revenues. Cols. 11 + 14 + 15.	Total Earnings per Train Mile.
		$ cts.	Cents.	$ cts.	$ cts.	$ cts.	p. c.	$ cts.	$ cts.	$ cts.	$ cts.
73	Stanstead, Shefford and Chambly	38,001 43	1·290	96 94	73,069 18	1 00100	51·94	236 50	44 87	73,350 55	87607
74	St. Clair Tunnel	.....	.....	277,052 00	277,052 00	.....	100·00	.....	41 00	277,093 00	.....
75	St. Lawrence and Adirondack	247,500 13	1·180	173 90	421,969 29	2·44398	58·66	193 16	70 06	422,232 51	1·65096
76	Sydney and Louisburg	324,817 15	6·17	2,326 20	346,439 92	1·84840	93·66	221 91	2,625 97	349,287 80	1·65775
77	Spokane and British Columbia	594 20	3·757	166 50	819 68	1·86904	92·80	.....	.....	819 68	1·97990
78	Temiscouata	142,965 58	2·153	178 00	226,651 90	1·65570	62·20	2,228 69	1,267 60	230,148 19	1·43348
79	Temiskaming and Northern Ontario	685,385 28	1·499	24,685 33	1,236,529 99	2·72906	53·62	18,538 81	69,060 36	1,324,129 16	2·48029
80	Thousand Islands	19,957 08	10·783	.....	30,776 28	·59283	60·52	.....	2,195 05	32,971 33	·97942
81	Toronto, Hamilton and Buffalo	504,711 77	1·051	29,831 34	789,026 12	3·18878	67·11	2,718 67	4,698 36	796,443 15	1·85289
82	Vancouver, Victoria and Eastern	312,625 65	1·236	859 03	399,616 50	3 08557	77·87	1,914 09	1,009 05	402,539 64	2·27956
83	Victoria Terminal Ry. and Ferry Co.	1,964 17	5·309	1,158 04	5,211 32	1·46675	56·90	47 01	230 00	5,488 33	1·91563
84	Victoria and Sidney, B. C	22,521 14	5·755	12 65	42,780 97	2·83065	52·49	146 33	.....	42,927 30	3·43665
85	Wabash Railroad Co. in Canada	1,521,299 68	5·28	3,216 20	2,119,926 05	1·86365	71·80	3,103 47	178 48	2,123,208 00	1·41363
86	Wellington Colliery Co.	44,111 04	1·247	.....	47,464 79	1·41381	92·94	.....	.....	47,464 79	1·52130
87	York and Carleton	3,530 00	3·768	.....	5,375 00	·41578	65·68	.....	.....	5,375 00	·63309
	Final total	95,437,731 41	.....	1,217,311 82	141,967,402 50	.....	.....	493,895 13	2,595,038 56	145,056,336 19	.....

TABLE 8

SUMMARY OF OPERATING EXPENSES

TABLE 8.—SUMMARY of Operating Expenses

No.	1. Name of Railway.	2	3	4	5	6
		MAINTENANCE OF WAY				
		Superintendence.	Ballast.	Ties.	Rails.	Other Track Material.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1	Alberta Ry. & Irrigation Co	3,000 00		25,995 29	385 84	4,295 32
2	Algoma Central & Hudson Bay	4,598 10	628 32	2,212 95	32 37	1,485 38
3	Atlantic and Lake Superior			4,698 23		
4	Atlantic, Quebec & Western					
5	Bay of Quinte	1,082 56	378 90	4,129 11	29 37	118 27
6	Bedlington & Nelson Ry. Co.	890 00	0 50	147 32	Cr. 12 11	2 14
7	Bessemer & Barrys Bay			128 70		12 00
8	Brandon, Saskatchewan & Hudson Bay	3,658 96	1 49	36 12	Cr. 40 75	418 44
9	British Yukon	328 56	3,644 12	3,781 58		540 10
10	Brockville, Westport & North Western			1,870 50		
11	Canada Southern	34,333 78	19,626 02	117,861 80	101,535 49	126,657 29
12	Canadian Govt. Rys.(Intercolonial)	47,064 15	31,710 60	280,399 16	65,018 05	116,971 64
13	" " (P.E.Island)	2,745 35	1,735 85	13,573 69	2,068 80	2,497 34
14	Canadian Northern	41,922 63	Cr. 89 60	248,745 65	6,601 53	48,945 32
15	" " Ontario	5,880 68		1,927 58	0 68	1,303 32
16	" " Quebec	9,491 97		29,203 55	Cr.1,486 00	4,733 07
17	Canadian Pacific	387,626 39	66,953 63	920,799 74	551,181 90	301,528 91
18	Cape Breton			1,353 02		
19	Caraquet	720 00	3,730 00	3,087 15		725 00
20	Carillon and Grenville			539 00		45 00
21	Central Ontario	2,010 00	1,901 90	6,600 00	592 86	1,096 21
22	Crowsnest Southern	5,652 85	1 65	8,738 97	1,205 15	911 73
23	Cumberland Ry. & Coal Co	1,200 00		2,380 00	269 70	1,144 86
24	Dominion Atlantic	2,192 39	2,988 70	21,154 93	9,117 06	2,331 05
25	Elgin & Havelock	50 00	148 16	1,296 78		90 37
26	Eastern British Columbia	344 60		95 96		
27	Grand Trunk	102,676 82	31,608 39	665,357 41	504,272 36	375,218 61
28	Grand Trunk (Canada Atlantic)	11,249 56	5,253 84	83,067 67	15,004 32	5,204 51
29	Halifax & Southwestern	4,596 66		12,539 49		10,088 64
30	Hampton & St. Martins			1,214 81		241 12
31	Hereford	1,469 70	487 50	3,734 83	45 72	1,150 96
32	Inverness Ry. & Coal Co	1,273 66		6,683 10	1,381 32	2,995 11
33	Irondale, Bancroft & Ottawa		915 24	1,338 99		557 06
34	Kaslo & Slocan			463 50		2 30
35	Kent Northern	625 00		1,500 00		500 00
36	Kettle River Valley	28 73		355 52		
37	Kingston & Pembroke	3,398 11		10,009 16		1,459 07
38	Klondike Mines				1 50	
39	Liverpool & Milton					
40	Lotbinière & Megantic		1,218 92	1,185 53	247 15	
41	London & Port Stanley	986 45	142 91	9,857 72	72 45	1,935 18
42	Manitoulin and North Shore	1,214 34	33 15	1,407 11		504 11
43	Maritime Coal, Ry. and Power Co.			513 58		
44	Massawippi Valley	1,511 05		5,554 68	194 74	1,302 02
45	Midland Ry. Co. of Manitoba	5,140 49	1 82	178 69	Cr. 51 29	227 95
46	Montreal and Atlantic	7,268 32	8,836 09	24,829 93	12,687 26	7,337 64
47	Montreal and Province Line	855 55	354 79	3,410 73	301 76	742 99
48	Montreal and Vermont Junction	855 71	1 20	5,153 45	9 64	600 89
49	Morrissey, Fernie and Michel			1,165 07		2,436 39
50	Moncton and Buctouche			1,793 16		410 10
51	Napierville Junction	642 15		80 99	36 43	331 70
52	Nelson and Fort Sheppard	3,779 43	1 15	5,702 67	Cr. 22 83	326 29
53	New Brunswick Coal and Ry. Co.			6,075 01		192 25
54	New Brunswick and P. E. Island	100 00		2,367 92		239 94

SESSIONAL PAPER No. 20b

for the Year ending June 30, 1909.

7	8	9	10	11	12	13	

AND STRUCTURES.

Roadway and Track.	Removal of Snow, Sand and Ice.	Tunnels.	Bridges, Trestles and Culverts.	Over and Under Grade Crossings.	Grade Crossings, Fences, Cattle Guards and Signs.	Snow and Sand Fences and Snow Sheds.	No.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
32,350 62	1,176 26		3,980 29		5,432 39		1
7,148 24	3,937 21		6,143 51		162 45		2
17,571 99	1,601 60		1,887 45		680 87	435 43	3
4,928 14	1,414 08		22 00		45 35		4
14,972 28	1,140 15		300 95		1,100 30	85 50	5
1,096 88	5 04		1,113 66	10 99	0 38	0 11	6
1,822 13	66 25		1,101 37				7
18,485 33	3,668 39		2,301 01	5 75	199 15	193 69	8
21,434 06	13,660 92		1,362 83		45 36	541 83	9
4,599 17	417 23		736 73		1,186 84		10
297,374 68	3,178 60		39,830 24	2,409 34	13,369 18		11
555,407 29	150,161 01		60,819 79	1,084 66	58,310 99	11,645 88	12
64,870 81	6,515 52		1,251 83	75 11	5,514 85	2,062 55	13
740,080 00	42,687 46		103,999 73		14,655 13	Cr. 5 03	14
61,520 82	4,257 27		7,226 95		614 57	94 99	15
54,504 97	22,615 49		21,425 13		5,416 54	1,816 15	16
4,228,052 33	521,469 41	8,312 11	928,940 23	3,530 80	188,742 59	59,052 36	17
3,451 18	74 50		118 70		220 50		18
10,120 00	510 00		1,100 25		250 00		19
477 00			210 00		250 00		20
24,284 05	1,978 88		2,643 23		2,671 01		21
73,927 49	6,668 35		37,672 94	31 29	282 38	28 36	22
16,064 04			85 41			39 00	23
44,158 20	5,422 54		11,066 15	835 19	6,056 92	595 42	24
2,715 67			961 56		18 49		25
3,840 22	241 53		60 10				26
1,081,388 73	234,560 91	Cr. 175 90	122,721 63	28,289 98	166,536 97	7,827 27	27
144,771 38	24,650 71		19,242 25		8,629 03	752 04	28
61,458 22	607 66		3,895 99	46 76	1,444 38	56 32	29
			507 34				30
15,660 22	2,300 92		903 58		306 17	1 10	31
18,968 20	417 70		1,827 41		1,546 33	28 80	32
7,039 40			457 50				33
4,596 28	3,037 88		2,139 90				34
1,095 00			25 00		15 00		35
1,069 21	357 96		14 00				36
26,631 41	1,473 52		30 25		1,443 48		37
10,765 92	2,767 76		2,396 58		6 00	4 00	38
							39
5,448 63	424 19		710 86				40
10,317 86	501 09		9,469 07	309 02	950 73		41
3,534 54	407 85		311 87				42
4,765 19	259 78		12 11		80 57		43
20,200 05	917 27		2,040 51		255 20		44
25,879 85	946 14		198 70		129 53	76 67	45
64,176 98	11,766 98		45,067 53		4,622 70	3,942 85	46
9,293 53	3,333 60	995 17	11 00		912 81	70 28	47
5,006 91	2,343 37		633 19		477 48	116 51	48
3,728 03	3,082 92						49
4,842 79			866 08			126 30	50
2,735 62	970 00		56 22		460 52	29 02	51
27,042 99	2,046 98		9,027 39		9 36	0 27	52
12,735 09			2,070 31				53
4,500 34			1,842 66		720 90		54

TABLE 8.—SUMMARY of Operating Expenses

No.	1 Name of Railway.	2 Maintenance of Way: Superintendence.	3 Maintenance of Way: Ballast.	4 Maintenance of Way: Ties.	5 Maintenance of Way: Rails.	6 Maintenance of Way: Other Track Material.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
55	New Brunswick Southern,	2,824 70	1,389 25	1,113 43	4,709 55	878 85
56	New Westminster Southern.	1,808 61	743 55	1,804 39	48 28	165 79
57	Nosbonsing and Nipissing					
58	North Shore Railway Co					
59	Nova Scotia Steel and Coal Co			891 82		14 88
60	Orford Mountain			1,549 81		103 11
61	Ottawa and New York	1,136 83	3,356 62	4,323 20	1,362 95	388 89
62	Phillipsburg Ry. and Quarry Co.			216 00		
63	Princeton Br'ch of Washington Co.	94 73	168 72	996 98		54 17
64	Père Marquette	8,411 50	2,390 61	13,373 46	1,205 31	5,525 11
65	Quebec Central	4,304 99		16,689 71	25,400 00	4,077 77
66	Quebec and Lake St. John	5,164 81	180 13	3,809 89	1,444 71	3,945 37
67	Quebec Ry., Light and Power Co.	154 00	39 76	576 79		16 66
68	Quebec, Montreal and Southern	5,294 29		15,751 40	711 17	2,072 71
69	Red Mountain	960 49	16	2,014 56	Cr. 6 01	419 39
70	Rutland and Noyan	113 65		248 29		17 44
71	Salisbury and Harvey		199 00	3,044 68	707 10	385 46
72	Schomberg and Aurora.					
73	Stanstead, Shefford and Chambly	670 48	1,545 95	2,517 40	1,292 03	345 12
74	St. Clair Tunnel	411 52	62 10	302 04	629 68	504 64
75	St. Lawrence and Adirondack	1,832 55	557 83	9,179 05	1,198 79	2,363 76
76	Sydney and Louisburg	850 00		8,070 16	1,351 97	5,044 10
77	Spokane and British Columbia	22 95		209 18		2 50
78	Temiscouata	1,413 60		10,094 27	786 72	1,181 95
79	Temiskaming and Northern Ontario	3,949 15	252 71	2,026 29	1,140 39	1,335 36
80	Thousand Islands	13 65	18 05	393 10	5 70	443 22
81	Toronto, Hamilton and Buffalo	6,157 47	4,873 65	11,592 95	20,215 97	8,948 29
82	Vancouver, Victoria and Eastern	10,054 77	772 84	7,271 67	10,903 60	15,942 46
83	Victoria Terminal Ry. and Ferry Co.	25 50		123 08		4 32
84	Victoria and Sidney, B.C.	340 89		1,635 12	Cr. 111 63	57 42
85	Wabash Railroad Co. in Canada	765 15	30 63	142 78	Cr. 204 98	246 07
86	Wellington Colliery Co.			2,175 80		
87	York and Carleton					
	Total	759,240 98	198,796 80	2,678,384 80	1,343,471 77	1,084,342 40

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for the Year ending June 30, 1909—*Continued.*

7	8	9	10	11	12	13	

AND STRUCTURES—*Continued.*

Roadway and Track.	Removal of Snow, Sand and Ice.	Tunnels.	Bridges, Trestles and Culverts.	Over and under Grade Crossings.	Grade Crossings, Fences, Cattle Guards and Signs.	Snow and Sand Fences, and Snow Sheds.	No.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
11,103 71	762 66		2,676 22		719 07	0 37	55
12,929 43	35 79		566 16		148 27	0 87	56
							57
631 80							58
2,397 10					620 00		59
8,389 22	2,010 56		139 79		1,022 44	102 52	60
19,013 93	1,480 67		60,446 06		983 92	141 25	61
							62
1,630 11					106 24		63
46,364 19	1,814 97		9,966 26	123 61	6,788 67		64
73,885 92	2,632 20		12,778 86		1,390 41	429 19	65
48,097 22	24,498 42		4,178 96		6,487 77	585 74	66
2,265 62	306 96		382 31		344 87	66 91	67
20,066 88	7,832 49		4,754 94		4,929 80	383 38	68
6,477 00	1,508 41		2,386 18		8 43	0 04	69
712 19	105 35				53 28		70
8,079 66			3,463 04		70 83		71
							72
7,338 49	2,282 66		4,229 44	80 00	462 24	56 50	73
4,657 48		9,190 99	38 15				74
15,400 94	2,514 38		5,047 99	338 90	2,960 19	40 06	75
32,778 77	195 07		2,845 01		1,127 94		76
775 45	61 98		10 75				77
27,207 93	863 53		4,531 53		417 63	109 68	78
85,939 08	16,687 53		2,468 38	5 93	651 81		79
1,932 19	42 78		2 92		150 87		80
59,902 82	1,635 71	90 90	12,655 34	2 54	3,401 39	3 53	81
69,206 19	2,622 37		6,681 62		731 03	0 76	82
279 37			19 39		42 60		83
3,683 64			180 76		693 62		84
224 98					19 88		85
13,665 76							86
1,341 00					5 00		87
8,469,429 03	1,139,937 37	18,413 27	1,603,291 03	37,179 87	528,111 60	91,538 47	

TABLE 8.—SUMMARY of Operating Expenses

No.	Name of Railway.	14	15	16	17	18
			MAINTENANCE OF WAY			
			Signals and interlocking plants.	Telegraph and telephone lines.	Electric power transmission	Buildings, fixtures and grounds.
			$ cts.	$ cts.	$ cts.	$ cts.
1	Alberta Ry. & Irrigation Co.			1,551 02		4,786 35
2	Algoma Central & Hudson Bay			1,501 37		1,047 64
3	Atlantic & Lake Superior					1,059 07
4	Atlantic, Quebec & Western			5 80		98 15
5	Bay of Quinte		34 65	110 00		1,133 57
6	Bedlington & Nelson		21 94	20 18		599 30
7	Bessemer & Barry's Bay			4 00		
8	Brandon, Sask. & Hudson Bay		205 29	155 40		1,936 80
9	British Yukon			501 17		3,496 44
10	Brockville, Westport & Northwestern					1,120 22
11	Canada Southern		41,448 38	7,463 14		32,708 15
12	Canadian Government Rys.—Intercolonial		6,405 50	1,500 13		159,597 64
13	" " P.E. Island		46 60	6 91		8,661 18
14	Canadian Northern		3,164 28	24,946 56		103,105 06
15	Canadian Northern, Ontario		325 59	1,943 59		1,370 19
16	Canadian Northern, Quebec		1,790 05	174 97		10,682 38
17	Canadian Pacific		40,660 83	175,920 41		1,173,963 12
18	Cape Breton			6 55		59 21
19	Caraquet			435 00		
20	Carillon & Grenville					50 00
21	CentralOntario			194 82		5,234 38
22	Crowsnest Southern		120 87	518 96		3,077 63
23	Cumberland Ry. & Coal Co.					
24	Dominion Atlantic		24 01	73 50		9,101 84
25	Elgin & Havelock					128 21
26	Eastern British Columbia			20 15		50 74
27	Grand Trunk		24,344 52	12,378 70		558,613 97
28	Grand Trunk (Canada Atlantic)		217 14	7,766 55		46,194 54
29	Halifax & Southwestern		65 68	887 66		8,210 46
30	Hampton & St. Martin's			134 28		
31	Hereford					812 51
32	Inverness Ry. & Coal Co.			171 08		1,878 99
33	Irondale, Bancroft & Ottawa					
34	Kaslo & Slocan					132 65
35	Kent Northern					15 00
36	Kettle River Valley					
37	Kingston & Pembroke			48 49		602 57
38	Klondike Mines			30 85		111 80
39	Liverpool & Milton					
40	Lotbinière & Megantic			46 92		389 84
41	London & Port Stanley		104 33	24 28		1,540 98
42	Manitoulin & North Shore			59 15		195 19
43	Maritime Coal, Railway & Power Co.			39 49		49 44
44	Massawippi Valley					4,488 25
45	Midland Railway Co. of Manitoba		543 23	227 20		1,032 74
46	Montreal & Atlantic		1,324 65	2,573 07		17,204 55
47	Montreal and Province Line			121 58		146 84
48	Montreal and Vermont Junction			162 63		256 93
49	Morrissey, Fernie & Michel					922 30
50	Moncton & Buctouche					281 80
51	Napierville Junction		51 82	27 42		37 65
52	Nelson & Fort Sheppard		87 70	273 01		674 41
53	New Brunswick Coal & Railway Co.		76 46	427 38		522 40
54	New Brunswick & Prince Edward Island					529 72
55	New Brunswick Southern					1,157 21
56	New Westminster Southern		47 68	Cr. 303 47		85 39
57	Nosbonsing & Nipissing					

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for the Year ending June 30, 1909—*Continued.*

19	20	21	22	23	24	25	
AND STRUCTURES—*Continued.*							
Docks and wharfs.	Roadway tools and supplies.	Work equipment—repairs.	Work equipment—renewals.	Work equipment—depreciation.	Injuries to persons.	Stationery and Printing.	No.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.....	.....				.....	75 05	1
5,106 52	749 40				22 13	163 31	2
.....	....				.....	....	3
....	.. ..				.....	.....	4
78 94	30 53				.....	....	5
....	75 97				7 00	25 46	6
....	.. ..				.....	.....	7
....	553 56				37 21	114 63	8
18 07	826 55				123 52	7 00	9
.....	.....				.....	.....	10
3,378 89	14,174 73				469 28	1,119 72	11
18,135 69	25,414 77				390 39	3,971 22	12
1,777 92	1,484 79				.....	192 42	13
1,996 37	15,528 24				3,052 32	1,300 77	14
.....	1,737 35				.... .	235 13	15
.....	1,674 71				35 00	141 43	16
105,985 68	116,112 66				27,402 47	25,950 43	17
....	17 27				.....	.....	18
.....	.. ..				.....	.....	19
100 00	50 00				....	..... .	20
.....	93 23				35 00	4 87	21
.. ..	2,458 72				649 95	131 88	22
.....	.....				.....	.....	23
212 78	1,770 29				2 50	17 97	24
.....	72 24				247 18	.....	25
... .	52 56				.....	23 47	26
46,133 43	27,223 31				7,494 97	4,396 06	27
179 46	3,787 12				76 59	333 66	28
11 47	1,471 68				....	91 11	29
.. ..	52 21				.....	.....	30
.....	599 01				15 38	5 60	31
... .	389 96				....	81 14	32
.....	.....				....	... .	33
17 20	25 47				....	... .	34
....	.....				.....	.....	35
.. ..	0 93				.....	.....	36
716 09	720 55				.. . .	88 48	37
82 40	71 75				....	....	38
.....	....				.....	.....	39
62 17	.....				.....	0 90	40
459 81	213 46				625 50	22 08	41
.....	100 51				.....	13 82	42
.....	.....				.....	.....	43
58 08	643 06				119 60	12 82	44
.....	350 08				36 24	152 83	45
.....	1,372 16				3 25	272 49	46
.....	247 74				.....	10 82	47
.....	91 09				.....	27 06	48
.....	....				....	.....	49
.....	90 10				.....	.....	50
.....	43 85				.....	2 52	51
555 61	.....				146 92	89 14	52
.....	1,063 80				....	.....	53
7 95	215 65				....	30 00	54
155 44	967 83				30 00	37 12	55
....	135 82				12 40	38 20	56
.....	....				....	.....	57

Transferred to maintenance of equipment.

Transferred to maintenance of equipment.

Transferred to maintenance of equipment.

TABLE 8.—SUMMARY of Operating Expenses

No.	14	15	16	17	18
	Name of Railway.	MAINTENANCE OF WAY			
		Signals and interlocking plants.	Telegraph and telephone lines.	Electric power transmission	Buildings, fixtures and grounds.
		$ cts.	$ cts.	$ cts.	$ cts.
58	North Shore Railway Co.				
59	Nova Scotia Steel & Coal Co.				
60	Orford Mountain		157 78		189 55
61	Ottawa & New York	869 33	91 01		1,471 86
62	Philipsburg Railway & Quarry Co.				
63	Princeton Branch of Washington Co.				
64	Père Marquette	1,415 92	207 75		9,649 91
65	Quebec Central				8,349 09
66	Quebec & Lake St. John	217 04	198 26		9,316 94
67	Quebec Railway, Light & Power Co.	20 98	65 80		340 64
68	Quebec, Montreal & Southern	500 51	13 32		4,172 51
69	Red Mountain	19 14	203 95		406 68
70	Rutland & Noyan	9 16			6 06
71	Salisbury & Harvey				391 01
72	Schomberg & Aurora				
73	Stanstead, Shefford & Chambly	3 17	158 72		1,619 41
74	St. Clair Tunnel	964 71	5 51	3,211 76	2,853 04
75	St. Lawrence & Adirondack	1,820 54	46 55		3,601 31
76	Sydney & Louisburg				1,677 33
77	Spokane & British Columbia		14 00		19 35
78	Temiscouata				3,722 50
79	Temiskaming & Northern Ontario	482 55	2,770 58	1,434 60	6,317 53
80	Thousand Islands				590 65
81	Toronto, Hamilton & Buffalo	3,640 44	2 75		8,834 48
82	Vancouver, Victoria & Eastern	355 10	807 88		5,736 77
83	Victoria Terminal Railway & Ferry Co.		2 85		33 61
84	Victoria & Sydney, B. C.		37 87		447 01
85	Wabash Railroad Co. in Canada				2,477 15
86	Wellington Colliery Co				
87	York & Carleton				
	Final total	131,419 79	246,934 48	4,646 36	2,241,319 79

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for the Year ending June 30, 1909.—*Continued.*

19	20	21	22	23	24	25	
AND STRUCTURES—*Continued.*							
							No.
Docks and wharfs.	Roadway, tools and supplies.	Work equipment—repairs.	Work equipment—renewals.	Work equipment—depreciation.	Injuries to persons.	Stationery and printing.	
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.....	....				....	.....	58
....	.....				....	....	59
.....	360 94				3 75	.. ..	60
.. ..	1,145 96				433 50	0 71	61
.....	.....				.....	....	62
... .	.....				.....	8 45	63
Cr. 534 08	701 10				.. ..	226 88	64
.....	2,418 07				100 00	164 39	65
92 21	2,005 17				26 00	69 64	66
75 02	.....				.....	7 23	67
6 19	741 80				5 00	177 59	68
.....	147 68				96 32	25 59	69
....	22 66				.. ..	6 36	70
.....	.....				.....	....	71
.....	.....				. .....	.....	72
....	272 98				0 95	9 87	73
212 39	73 34				....	3 00	74
.....	232 32				5 26	0 19	75
....	.....				....	.....	76
.....	0 78				....	.. ..	77
....	749 01				....	4 21	78
.....	4,049 45				25 00	249 51	79
24 12	.....				....	... .	80
....	1,434 77				636 20	130 39	81
530 26	1,513 72				192 88	236 69	82
155 56	8 47				....	....	83
2,088 00	112 68				.....	....	84
.. ..	2 99				3 55	18 42	85
....	.....				.....	....	86
.....	50 00				.....	....	87
187,879 64	238,798 60	.....	.....	.....	42,563 21	40,519 73	

Transferred to maintenance of equipment.

TABLE 8.—SUMMARY of Operating Expenses for the Year ending June 30, 1909.—*Continued.*

Number.	27	28	29	30	31	32	33	34	35	36
		MAINTENANCE OF WAY AND STRUCTURES.					MAINTENANCE OF EQUIPMENT.			
	Name of Railway.	Other Expenses.	Total of Foregoing Accounts.	Maintaining Joint Tracks, Yards and other Facilities. DR.	Maintaining Joint Tracks, Yards and other Facilities, CR.	Total Maintenance of Way and Structures.	Superintendence.	Steam Locomotives—Repairs.	Steam Locomotives—Renewals.	Electric Locomotives—Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1	Alberta Ry. & Irrigation Co.	848 95	83,877 38	389 32		84,266 70	1,182 80	11,354 17		
2	Algoma Central & Hudson Bay	115 56	35,054 46			35,054 46	3,238 44	13,454 36		
3	Atlantic & Lake Superior	426 48	28,361 12			28,361 12	1,232 45	8,396 66		
4	Atlantic, Quebec & Western	17 14	6,530 66			6,530 66		970 19		
5	Bay of Quinté	384 90	25,109 98			25,109 98		12,803 55		
6	Bedlington & Nelson	1 03	4,005 79			4,005 79	2 45	81 21		
7	Bessemer & Barry's Bay		3,134 45			3,134 45			142 19	
8	Brandon, Sask. & Hudson Bay	4 14	31,884 61			31,884 61	582 23	4,515 39		
9	British Yukon		50,312 11			50,312 11	1,686 06	5,977 97		
10	Brockville, Westport & Northwestern		9,930 69			9,930 69	780 00	675 42	805 00	
11	Canada Southern		857,138 71	50,867 66	90,671 77	817,334 60	32,610 29	440,196 41	15,135 98	
12	Canadian Govt. Rys—Intercolonial	2,461 49	1,576,470 05	75,605 10	9,677 08	1,642,398 07	54,170 49	742,354 82	133,333 32	
13	" P.E. Island	2 50	115,084 02			115,684 02	6,358 35	25,405 45		
14	Canadian Northern	204 45	1,400,840 87	6,259 56	1,887 75	1,405,212 68	18,919 48	665,309 16		
15	Canadian Northern, Ontario	273 04	88,711 75			88,711 75	2,819 30	21,043 07		
16	Canadian Northern, Quebec	530 30	162,749 71		342 49	162,407 22	4,665 06	39,394 55		
17	Canadian Pacific	4,579 34	9,836,705 34	65,789 16	26,944 17	9,875,550 33	216,522 27	4,537,493 40	222,331 95	
18	Cape Breton	143 14	5,444 07			5,444 07		479 92		
19	Caraquet	90 00	20,767 40			20,767 40	600 00	5,150 00		
20	Carillon & Grenville	230 00	1,951 00			1,951 00	480 00	150 00		
21	Central Ontario	39 10	49,379 54			49,379 54	1,020 00	6,801 11		
22	Crow's Nest Southern	4 93	142,084 10	90 75		142,174 85	791 12	7,395 47		
23	Cumberland Ry. & Coal Co		21,183 01			21,183 01	1,200 00	2,025 68		
24	Dominion Atlantic	392 35	117,513 79			117,513 79	2,270 66	17,389 91	7,200 00	
25	Elgin & Havelock	108 90	5,837 56			5,837 56		25 00	789 52	
26	Eastern British Columbia		4,729 33			4,729 33	67 76	225 78		
27	Grand Trunk		4,000,868 14	31,901 09	360,174 83	3,672,594 40	70,833 24	1,973,417 56		
28	Grand Trunk (Canada Atlantic)		376,380 37	3,032 96	1,662 34	377,750 99	8,597 98	154,444 26		
29	Halifax & Southwestern	8,000 06	113,472 24	575 44		114,047 68	2,453 99	20,878 72		

30	Hampton & St. Martins	1,980 22	4,129 98			4,129 98		384 22		
31	Hereford		27,493 20	13 26	1 49	27,504 97	151 44	5,249 16	0 92	
32	Inverness Ry. & Coal Co	49 61	37,692 41			37,692 41	1,832 25	12,212 96		
33	Irondale, Bancroft & Ottawa		10,308 19			10,308 19		4,644 90		
34	Kaslo & Slocan	3 90	10,419 08			10,419 08	4 61	1,400 77		
35	Kent Northern	145 00	3,920 00			3,920 00		300 00		
36	Kettle River Valley		1,817 35			1,817 35	12 07	107 18		
37	Kingston & Pembroke		46,621 18	1,096 36		47,717 54	32 00	10,049 23		
38	Klondike Mines		16,238 56			16,238 56		2,107 28		
39	Liverpool & Milton		873 12			873 12		1,952 49		
40	Lotbinière & Megantic	206 56	9,941 67			9,941 67		1,180 45	403 03	
41	London & Port Stanley		37,532 92		4,209 27	33,323 65	467 81	11,365 84	127 29	
42	Manitoulin & North Shore		7,781 64			7,781 64	1,119 88	1,625 29		
43	Maritime Coal Ry. & Power Co		5,720 16			5,720 16		2,112 45	2,520 50	
44	Massawippi Valley	27 21	37,324 54	699 96	360 00	37,664 50	618 29	3,167 96		
45	Midland Ry. Co. of Manitoba	58 78	35,129 65			35,129 65	300 19	3,705 37		
46	Montreal & Atlantic	9 00	213,295 45	151 23		213,446 68	3,136 99	52,259 77	17,000 00	
47	Montreal & Province Line		20,809 19			20,809 19	645 49	80 59		
48	Montreal & Vermont Junction		15,736 06			15,736 06	529 80			
49	Morrissey, Fernie & Michel		11,334 71		107 25	11,227 46		7,042 41		
50	Moncton & Buctouche		8,410 33			8,410 33	582 00	808 18		
51	Napierville Junction		5,455 91		9 07	5,446 84	155 30	1,028 27		
52	Nelson & Fort Sheppard	3 22	49,743 71	3,366 00		53,109 71	574 93	5,168 07		
53	New Brunswick Coal & Ry. Co	11 56	23,174 26			23,174 26		10,683 92		
54	New Brunswick & P. E. Island		10,555 08			10,555 08	100 00	1,988 21		
55	New Brunswick Southern		28,525 41	680 00		29,205 41		2,426 72		
56	New Westminster Southern	1 38	18,268 54			18,268 54	474 71	3,686 94		
57	Nosbonsing & Nipissing		7,455 88			7,455 88				
58	North Shore Ry. Co		631 80			631 80		78 40		
59	Nova Scotia Steel & Coal Co		3,923 80			3,923 80		1,126 50		
60	Orford Mountain	26 50	14,055 97			14,055 97		1,535 67		
61	Ottawa & New York	0 70	96,647 39	663 66	60 00	97,251 05	2,142 43	7,580 58	Cr. 200 00	
62	Philipsburg R. & Quarry Co		216 00			216 00				
63	Princeton Branch of Washington Co		3,059 40			3,059 40	65 04	152 93	56 52	
64	Père Marquette	513 71	108,144 88	60,095 14	309 70	167,930 32	4,807 17	114,213 80	1,280 80	
65	Quebec Central	48 83	152,669 43			152,669 43	7,299 33	33,147 20	13,750 00	
66	Quebec & Lake St. John	30 73	110,319 01		752 02	109,596 99	3,570 35	47,336 81		
67	Quebec Railway, Light & Power Co	0 40	4,663 95	238 42		4,902 37	345 12	3,207 44	1 90	
68	Quebec, Montreal & Southern		67,113 98	838 44	7,814 69	60,437 78	4,996 98	9,802 21		
69	Red Mountain	0 80	14,668 81			14,668 81	207 28	3,479 84		
70	Rutland & Noyan	2 78	1,297 22			1,297 22	90 70	428 70	109 56	
71	Salisbury & Harvey		16,340 78			16,340 78	606 50	2,512 15		
72	Schomberg & Aurora									
73	Stanstead, Shefford & Chambly		22,385 41	34 01		22,919 42	603 15	171 30		
74	St. Clair Tunnel		23,120 35			23,120 35	850 22	4,238 79		11,060 55
75	St. Lawrence & Adirondack		47,140 61	21,708 79		68,849 40	267 46	14,002 65		
76	Sydney & Louisburg	298 86	54,239 21			54,239 21	660 00	44,635 26		
77	Spokane & British Columbia	0 14	1,117 08			1,117 08	9 97	91 25		
78	Temiscouata		51,082 56			51,082 56	2,341 45	11,131 17		
79	Temiscaming & Northern Ontario	3,379 32	133,165 17			133,165 17	9,383 28	51,165 28		

TABLE 8.—SUMMARY of Operating Expenses for the Year ending June 30, 1909.—*Continued.*

Number.	27	28	29	30	31	32	33	34	35	36
	Name of Railway.	MAINTENANCE OF WAY AND STRUCTURES—*Continued.*					MAINTENANCE OF EQUIPMENT.			
		Other Expenses	Total of Foregoing Accounts.	Maintaining Joint Tracks, Yards and other Facilities. DR.	Maintaining Joint Tracks, Yards and other Facilities. CR.	Total—Maintenance of Way and Structures	Superintendence.	Steam Locomotives—Repairs.	Steam Locomotives—Renewals.	Electric Locomotives—Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
80	Thousand Islands	24 70	3,641 95			3,641 95		1,782 19		
81	Toronto, Hamilton & Buffalo	51 00	144,210 59	563 68	9,265 21	135,509 06	4,396 37	36,718 80	Cr. 1,007 25	
82	Vancouver, Victoria & Eastern	9 19	133,559 80			133,559 80	2,168 37	21,548 54		
83	Victoria, Terminal Ry. & Ferry Co.		694 75			694 75	11 09	70 16		
84	Victoria & Sydney, B.C.		9,165 38			9,165 38	147 80	936 73		
85	Wabash Railway Co. in Canada		3,726 62	236,525 65	13,951 94	226,300 33	8,200 30	147,589 03		
86	Wellington Colliery Co.		15,841 56			15,841 56		4,148 01		
87	York & Carleton		1,396 00			1,396 00		25 00		
	Total	25,741 90	21,120,289 89	561,185 64	528,201 07	21,153,274 46	497,292 54	9,427,704 22	411,781 23	11,060 55

TABLE 8.—SUMMARY of Operating Expenses for the Year ending June 30, 1909.—*Continued.*

No.	Name of Railway	41	42	43	44	45	46	47	48
			MAINTENANCE OF EQUIPMENT—*Continued.*						
			Passenger Train Cars—Repairs.	Passenger Train Cars—Renewals.	Freight Train Cars—Repairs.	Freight Train Cars—Renewals.	Work Equipment—Repairs.	Work Equipment—Renewals.	Floating Equipment—Repairs.
			$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1	Alberta Railway and Irrigation Co		1,141 15		2,911 52				
2	Algoma Central and Hudson Bay		3,017 46		26,504 65				
3	Atlantic and Lake Superior		1,598 65		459 26		71 02		
4	Atlantic, Quebec and Western		136 64		33 90				
5	Bay of Quinté		3,811 40		8,890 91				
6	Bedlington and Nelson						98 63	3 94	
7	Bessemer and Barry's Bay								
8	Brandon, Saskatchewan and Hudson Bay		1,701 95		1,310 15		523 75		
9	British Yukon		2,423 12		2,839 90		2,241 17		
10	Brockville, Westport and Northwest		322 50		457 85	258 00			
11	Canada Southern		40,217 84		371,666 52	11,635 49	8,233 87	1,688 00	12,179 73
12	Canadian Government Railways (Intercolonial)		274,830 49	66,666 60	551,893 87	100,000 08	24,435 43		1,440 11
13	Canadian Government Railways (P. E. Island)		14,166 44	2,867 86	10,697 77	1,077 77	512 70	15 84	
14	Canadian Northern		126,985 02		310,391 38		10,923 13		
15	Canadian Northern Ontario		10,311 94		7,261 08		2,664 89		
16	Canadian Northern Quebec		14,183 64		29,334 69		1,503 79		
17	Canadian Pacific		1,558,932 21	80,631 06	2,731,548 35	735,024 46	313,673 43	82,939 66	4,398 08
18	Cape Breton		967 80		161 66				
19	Caraquet		250 25		1,210 00			225 00	
20	Carillon and Grenville		200 00						
21	Central Ontario		2,388 30		6,173 84		73 42		
22	Crowsnest Southern		1,152 13		5,057 29		2,388 06		
23	Cumberland Railway and Coal Co				9,169 19				
24	Dominion Atlantic		13,462 12		15,973 11		169 18		
25	Elgin and Havelock		13 95		58 36				
26	Eastern British Columbia				825 86		333 88		
27	Grand Trunk		349,414 24		1,165,318 93		56,990 63		20,756 65
28	Grand Trunk (Canada Atlantic)		17,211 78		73,599 61		13,379 33		

TABLE 8.—SUMMARY of Operating Expenses for the Year ending June 30, 1909—*Continued.*

No.	41	42	43	44	45	46	47	48
	Name of Railway.	MAINTENANCE OF EQUIPMENT—*Continued.*						
		Passenger Train Cars—Repairs.	Passenger Train Cars—Renewals.	Freight Train Cars—Repairs.	Freight Train Cars—Renewals.	Work Equipment—Repairs.	Work Equipment—Renewals.	Floating Equipment—Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
29	Halifax and Southwestern	7,172 95		5,745 48		642 63		
30	Hampton and St. Martin's			162 12				
31	Hereford	1,966 51	0 55	3,031 29	64 04	94 24	14 68	
32	Inverness Railway and Coal Co	3,627 90		7,047 69		418 57		
33	Irondale, Bancroft and Ottawa	148 80		222 07				
34	Kaslo and Slocan	188 83		1,006 95		125 95		
35	Kent Northern							
36	Kettle River Valley	8 63		24 82				
37	Kingston and Pembroke	4,301 35		2,297 28		61 07		
38	Klondike Mines	270 80		253 38		20 25		
39	Liverpool and Milton	120 00		150 00				
40	Lotbinière and Megantic		73 69	373 00	393 48			
41	London and Port Stanley	2,709 42	80 47	3,008 72	106 76	20 67	1 29	
42	Manitoulin & North Shore	135 47		2,564 44		77 64		
43	Maritime Coal, Railway & Power Co	126 10		408 21				
44	Massawippi Valley	3,925 39		6,894 22		116 10		
45	Midland Railway Co. of Manitoba	1,035 22		1,210 99		666 46		
46	Montreal & Atlantic	2,989 12		10,812 41	22,320 51	1,134 71	2,670 00	
47	Montreal & Province Line	73 15		161 98				
48	Montreal & Vermont Junction	64 21		172 51				
49	Morrissey, Fernie & Michel			4,074 77				
50	Moncton & Buctouche	159 93		732 44				
51	Napierville Junction	139 85		271 17		124 30		
52	Nelson & Fort Sheppard	950 36		1,228 88		414 06		
53	New Brunswick Coal & Railway Co	1,272 02		1,687 47				
54	New Brunswick & P. E. Island	736 25		1,200 47				
55	New Brunswick Southern	896 19		833 59		313 29		
56	New Westminster Southern	1,545 38		879 68		202 23		
57	Nosbonsing & Nipissing							

58	North Shore Railway Co	10 25		49 34				
59	Nova Scotia Steel & Coal Co	740 25		151 55				
60	Orford Mountain	290 52		693 88				
61	Ottawa & New York	2,938 35		2,909 13		Cr. 157 41		
62	Philipsburg Railway & Quarry Co							
63	Princeton Branch of Washington Co	208 76		400 28	3 91	11 09		
64	Père Marquette	10,070 86	299 11	183,942 03	6,485 12	977 76	60 00	1,907 17
65	Quebec Central	10,470 12	8,250 00	44,119 39				
66	Quebec & Lake St. John	15,343 17		15,903 48		1,703 56		118 62
67	Quebec Railway, Light & Power Co	683 29		1,635 41		60 30		
68	Quebec, Montreal & Southern	7,385 45		7,811 61	1,087 74	731 03		
69	Red Mountain	163 89		90 68		114 08		
70	Rutland & Noyan	218 14	90 09	653 22	54 23			
71	Salisbury & Harvey	736 41		1,227 55				
72	Schomberg & Aurora							
73	Stanstead, Shefford & Chambly	424 19		1,333 32		79 69		
74	St. Clair Tunnel	12 47		1,782 34				
75	St. Lawrence & Adirondack	2,275 53		14,093 09		202 86		
76	Sydney & Louisburg	2,435 34		46,385 84				
77	Spokane and British Columbia	7 06		21 21				
78	Temiscouata	3,054 77		4,685 86		1,975 29		
79	Temiskaming & Northern Ontario	18,952 07		18,397 16		3,794 04		
80	Thousand Islands	1,131 93		6 95		15 27		
81	Toronto, Hamilton & Buffalo	10,486 72		12,323 09	1,469 64	684 74		
82	Vancouver, Victoria & Eastern	4,398 50		5,381 59		1,702 30		311 48
83	Victoria Terminal Railway & Ferry Co	207 10						
84	Victoria & Sydney, B.C	2,758 42						
85	Wabash Railroad Co. in Canada	26,648 82		131,299 93	Cr. 263 39			
86	Wellington Colliery Co			5,127 00				
87	York and Carleton	15 00		5 00				
	Final total	2,595,472 23	158,959 43	5,893,635 61	879,717 84	454,543 08	87,618 41	44,111 84

TABLE 8.—SUMMARY of Operating Expenses

No.	54 Name of Railway.	55 Maintenance of Shop Machinery and Tools.	56 Maintenance of Power Plant Equipment.	57 Maintenance of Injuries to Persons.	58 Maintenance of Stationery and Printing.
		$ cts.	$ cts.	$ cts.	$ cts.
1	Alberta Railway and Irrigation Co.	771 20	1,703 05		47 69
2	Algoma Central and Hudson Bay	340 65			80 43
3	Atlantic and Lake Superior	392 78			
4	Atlantic, Quebec and Western				
5	Bay of Quinté	13 22			
6	Bedlington and Nelson	42 39			
7	Bessemer and Barry's Bay	2 50			
8	Brandon, Saskatchewan and Hudson Bay	296 40		70 94	30 53
9	British Yukon	852 16			7 93
10	Brockville, Westport and Northwestern	1 75			
11	Canada Southern	8,471 64		459 88	1,554 32
12	Canadian Government Railway (Intercolonial).	36,708 23		384 75	10,383 30
13	" " (P. E. Island)	1,732 56			287 67
14	Canadian Northern	41,514 49		810 90	2,936 05
15	Canadian Northern, Ontario	2,636 38			95 11
16	Canadian Northern, Quebec	1,632 94		237 99	284 84
17	Canadian Pacific	339,381 37		25,604 25	33,928 90
18	Cape Breton				
19	Caraquet	1,105 00			75 00
20	Carillon and Grenville	45 00			
21	Central Ontario	293 25			1 84
22	Crowsnest Southern	336 01		83 08	34 96
23	Cumberland Railway and Coal Co				
24	Dominion Atlantic	3,148 33			19 48
25	Elgin and Havelock				
26	Eastern British Columbia				54 43
27	Grand Trunk	269,801 13		3,162 46	10,089 90
28	Grand Trunk (Canada Atlantic)	12,981 23		186 71	991 59
29	Halifax and Southwestern	911 17		50 00	84 91
30	Hampton and St. Martins				
31	Hereford	291 04		15 58	57 63
32	Inverness Railway and Coal Co	733 04			81 14
33	Irondale, Bancroft and Ottawa				
34	Kaslo and Slocan	15 70			
35	Kent Northern				
36	Kettle River Valley	8 13			
37	Kingston and Pembroke	201 64		4 50	
38	Klondike Mines	19 75			0 50
39	Liverpool and Milton				
40	Lotbinière and Megantic	142 22			28 48
41	London and Port Stanley	431 48		34 70	29 22
42	Manitoulin and North Shore	5 85			14 19
43	Maritime Coal, Ry. and Power Co				
44	Massawippi Valley			15 00	
45	Midland Railway Co. of Manitoba	115 07		27 03	12 13
46	Montreal and Atlantic	3,869 70			364 58
47	Montreal and Province Line	8 68		3 00	29 60
48	Montreal and Vermont Junction	7 44			74 02
49	Morrissey, Fernie and Michel				
50	Moncton and Buctouche				
51	Napierville Junction				7 35
52	Nelson and Fort Sheppard	197 70		50 44	20 18
53	New Brunswick Coal and Railway Co	1,114 68			
54	New Brunswick and P. E. Island				15 00
55	New Brunswick Southern	56 17			15 35

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for the Year ending June 30, 1909—*Continued.*

60	61	62	63	64	65	67	
EQUIPMENT—*Continued.*							
Other Expenses.	Total of Foregoing Accounts.	Maintaining Joint Equipment at Terminals—Dr.	Equipment Borrowed—Dr.	Maintaining Joint Equipment at Terminals—Cr.	Equipment Loaned—Cr.	Total Maintenance of Equipment.	No.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
2,179 71	21,291 29		8,577 05			29,868 34	1
3,189 92	49,825 91		8,381 78	5,865 96		52,341 73	2
708 65	12,859 47	7,440 79				20,300 26	3
	1,140 73					1,140 73	4
75 21	25,594 29					25,594 29	5
0 36	228 98					228 98	6
3 98	148 67		1,327 08			1,475 75	7
27 88	9,059 22					9,059 22	8
	16,028 31					16,028 31	9
75 00	3,375 52					3,375 52	10
11 00	942,060 97	4,110 30		183 55		945,987 72	11
35,396 71	2,037,998 20	2,825 49				2,040,823 69	12
7,276 17	70,398 58					70,398 58	13
24 00	1,177,813 61		43,423 80	554 84	27,005 39	1,193,677 18	14
8,000 50	54,832 27		2,048 59		3,244 64	53,636 22	15
4,126 25	95,363 75		16,537 66		34,827 78	77,073 63	16
144 35	10,882,553 74	219 44		416 21		10,882,347 97	17
30 71	1,640 09					1,640 09	18
84 00	8,699 25					8,699 25	19
240 00	1,115 00					1,115 00	20
	16,751 76					16,751 76	21
34 85	17,272 97					17,272 97	22
	12,394 87					12,394 87	23
532 19	60,164 98					60,164 98	24
3 50	890 33					890 33	25
	1,507 71					1,507 71	26
1,434 88	3,921,219 62	6,921 98		49,181 07		3,878,960 53	27
661 99	282,054 48			15 24		282,039 24	28
2,927 45	40,867 30		1,290 54		911 16	41,246 68	29
42 50	588 84					588 84	30
0 03	11,237 11			46 49		11,190 62	31
	25,953 55		1,616 40		184 80	27,385 15	32
	5,015 77					5,015 77	33
4 20	2,747 01					2,747 01	34
	300 00					300 00	35
	160 83					160 83	36
4,397 84	21,344 91					21,344 91	37
	2,671 96					2,671 96	38
	2,222 49					2,222 49	39
157 75	2,752 10					2,752 10	40
13 12	18,396 79					18,396 79	41
0 53	5,543 29		68 28			5,611 57	42
	5,167 26					5,167 26	43
	14,736 96					14,736 96	44
10 18	7,082 64					7,082 64	45
	116,557 79					116,557 79	46
	1,002 49					1,002 49	47
	847 98					847 98	48
	11,117 18		107 70			11,224 88	49
53 72	2,336 27					2,336 27	50
	1,726 24					1,726 24	51
17 70	8,622 32					8,622 32	52
	14,758 09					14,758 09	53
	4,039 93		924 92			4,964 85	54
	4,541 31		5,672 36			10,213 67	55

TABLE 8.—Summary of Operating Expenses

No.	54	55	56	57	58
	Name of Railway.	MAINTENANCE OF			
		Shop machinery and tools.	Power plant equipment.	Injuries to persons.	Stationery and printing.
		$ cts.	$ cts.	$ cts.	$ cts.
56	New Westminster Southern	224 72		56 74	23 55
57	Nosbonsing and Nipissing				
58	North Shore Railway Co				
59	Nova Scotia Steel and Coal Co.				
60	Orford Mountain				
61	Ottawa and New York	1,140 31		19 20	21 73
62	Philipsburg Ry. and Quarry Co.				
63	Princeton Branch of Washington Co	18 32			3 27
64	Père Marquette	4,441 63		357 37	300 57
65	Quebec Central	4,608 94	502 24	111 00	123 05
66	Quebec and Lake St. John	3,323 41		1 00	208 47
67	Quebec Railway, Light and Power Co.	104 15			19 38
68	Quebec, Montreal and Southern	972 24		26 61	828 78
69	Red Mountain	86 13		20 47	8 75
70	Rutland and Noyan	37 35			
71	Salisbury and Harvey	1,253 44			
72	Schomberg and Aurora				
73	Stanstead, Shefford and Chambly	164 27		3 00	29 60
74	St. Clair Tunnel	95 70	3,954 98		
75	St. Lawrence and Adirondack	10 00		1 35	0 58
76	Sydney and Louisburg	780 02			
77	Spokane and British Columbia	10 90			
78	Temiscouata				50 01
79	Temiskaming and Northern Ontario	2,694 25	959 24	25 00	659 20
80	Thousand Islands	20 19			
81	Toronto, Hamilton and Buffalo	3,969 98		240 70	133 59
82	Vancouver, Victoria and Eastern	165 38		184 10	74 26
83	Victoria Terminal Railway and Ferry Co.	6 76			
84	Victoria and Sydney, B.C.	89 84			
85	Wabash Railway Co. in Canada	6,880 82		1,366 29	660 45
86	Wellington Colliery Co				
87	York and Carleton	10 00			
	Final Total	761,738 82	7,119 51	33,614 04	64,883 49

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for the Year ending June 30, 1909—*Continued.*

59	60	61	62	63	64	65

EQUIPMENT—*Continued.*

Other expenses.	Total of foregoing accounts.	Maintaining joint equipment at terminals. DR.	Equipment borrowed. DR.	Maintaining joint equipment at terminals. CR.	Equipment loaned. CR.	Total maintenance of equipment.	No.
$ cts.	cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
20 63	7,114 58					7,114 58	56
	3,494 95					3,494 95	57
	137 99					137 99	58
	2,018 30					2,018 30	59
145 74	2,665 81					2,665 81	60
74 80	16,469 12	23 85				16,492 97	61
							62
	1,220 12					1,220 12	63
147 24	329,290 63	413 68				329,704 31	64
6,691 41	129,072 68		31,866 46		22,835 54	138,103 60	65
7,528 99	95,037 86		23,992 31		7,939 05	111,091 12	66
73 30	6,130 29		419 94		212 89	6,337 34	67
125 90	33,768 55					33,768 55	68
6 94	4,178 06					4,178 06	69
67 16	1,749 15					1,749 15	70
	6,336 05		733 75			7,069 80	71
							72
	2,808 52					2,808 52	73
526 60	22,521 65					22,521 65	74
9 25	30,853 77	173 34				31,027 11	75
1,648 50	96,544 96		3,107 94			99,652 90	76
	140 39					140 39	77
7,790 90	31,029 45					31,029 45	78
13,912 77	119,942 30		9,161 76		2,235 24	126,868 82	79
4 00	2,960 53					2,960 53	80
7,206 51	76,622 89			4,985 61		71,637 28	81
77 42	36,011 94	477 10				36,489 04	82
	295 11		37 38			332 49	83
	3,932 79		499 02			4,431 81	84
3,265 24	325,647 49	39,717 52		5,364 08		360,000 93	85
	9,275 01					9,275 01	86
	55 00		255 00			310 00	87
121,201 13	21,453,948 92	62,314 49	160,049 72	66,613 05	99,396 49	21,510,303 59	

TABLE No. 8.—SUMMARY of Operating Expenses

68	69	70	71
	TRAFFIC		
No. Name of Railway.	Superintendence.	Outside Agencies.	Advertising.
	$ cts.	$ cts.	$ cts.
1 Alberta Ry. and Irrigation Co.			
2 Algoma Central and Hudson Bay	1,844 59		228 11
3 Atlantic and Lake Superior			
4 Atlantic, Quebec and Western			
5 Bay of Quinté	2,691 22		152 75
6 Bedlington and Nelson			
7 Bessemer and Barry's Bay			
8 Brandon, Saskatchewan and Hudson Bay	551 05	1,271 78	521 82
9 British Yukon	2,191 86	1,942 65	1,581 14
10 Brockville, Westport and Northwestern			
11 Canada Southern	49,520 92	36,793 74	15,522 00
12 Canadian Government Rys.—Intercolonial	50,534 14	59,860 74	48,427 91
13 " " P.E. Island	18 56		831 03
14 Canadian Northern	44,112 70	44,033 76	21,291 63
15 Canadian Northern, Ontario	6,832 55	660 53	6,453 35
16 Canadian Northern, Quebec	5,128 89	739 33	2,459 44
17 Canadian Pacific	374,515 42	1,049,041 45	408,841 87
18 Cape Breton			
19 Caraquet	720 00		
20 Carillon and Grenville			
21 Central Ontario	1,275 00	375 25	549 07
22 Crowsnest Southern	706 14	1,708 55	507 61
23 Cumberland Ry. and Coal Co	1,317 60		
24 Dominion Atlantic	6,752 43	9,227 58	6,575 75
25 Elgin and Havelock			
26 Eastern British Columbia			
27 Grand Trunk	138,908 77	338,900 38	141,172 33
28 Grand Trunk (Canada Atlantic)	15,148 84	6,594 88	10,290 86
29 Halifax and Southwestern	3,458 91	168 16	4,435 84
30 Hampton and St. Martins			146 40
31 Hereford	274 80	67 53	187 06
32 Inverness Ry. and Coal Co	45 40		243 38
33 Irondale, Bancroft and Ottawa			
34 Kaslo and Slocan			
35 Kent Northern			25 00
36 Kettle River Valley	10 14		1 48
37 Kingston and Pembroke	1,144 42		298 35
38 Klondike Mines	20 00		472 50
39 Liverpool and Milton			
40 Lotbinière and Megantic			
41 London and Port Stanley	1,617 99	1,632 87	818 76
42 Manitoulin and North Shore	240 29		
43 Maritime Coal, Railway and Power Co			
44 Massawippi Valley	875 84	238 88	
45 Midland Railway Co., of Manitoba	330 97	841 80	122 42
46 Montreal and Atlantic	0 75		
47 Montreal and Province Line	381 46	464 33	209 30
48 Montreal and Vermont Junction	953 67	1,690 45	531 53
49 Morrissey, Fernie and Michel			
50 Moncton and Buctouche			
51 Napierville Junction	280 41	61 05	7 59
52 Nelson and Fort Sheppard	430 57	1,004 02	443 03
53 New Brunswick Coal and Railway Co			
54 New Brunswick and Prince Edward Island			
55 New Brunswick Southern			178 73
56 New Westminster Southern	453 74	1,008 96	415 86
57 Nosbonsing and Nipissing			

for the Year ending June 30, 1909—*Continued.*

72	73	74	75	77	79	
EXPENSES.						
Traffic Associations.	Fast Freight Lines.	Industrial and Immigration Bureaus.	Stationery and Printing.	Other Expenses.	Total Traffic Expenses.	No.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
						1
82 60			131 31	34 76	2,321 37	2
						3
						4
			386 50	205 05	3,435 52	5
						6
						7
19 65		168 21	243 11	15 57	2,791 19	8
			107 19		5,822 84	9
						10
2,894 05	86,846 76	1,668 98	15,041 21		208,287 66	11
2,328 52			26,920 75	48 66	188,120 72	12
			103 54	13 20	966 33	13
593 08		3,867 88	14,749 66	68 64	128,722 35	14
211 12			702 80		14,860 35	15
236 36		0 72	1,151 96	7 67	9,724 37	16
34,932 20	44,481 31	11,862 62	151,429 01	66 17	2,075,170 05	17
						18
			295 00	157 00	1,172 00	19
						20
107 86			17 52		2,324 20	21
33 51		173 68	333 08	20 93	3,483 50	22
				1,891 05	3,208 65	23
10 00			1,544 19		24,109 95	24
				1 75	1 75	25
			5 00		5 00	26
24,970 87	142,548 63	169 87	38,954 08	308 50	825,933 43	27
2,035 29	58 92	14 24	5,292 77	27 46	39,463 26	28
233 11			750 02	672 49	9,718 53	29
					146 40	30
13 06	18 44		98 23	1 11	660 23	31
9 43			40 57		338 78	32
						33
						34
			50 00		75 00	35
			27 41		39 03	36
93 37			193 66		1,729 80	27
			23 01		515 51	38
						39
						40
102 52	280 71		501 79	0 42	4,955 00	41
			10 71		251 00	42
						43
			252 65		1,367 37	44
20 04		71 98	168 87	15 57	1,571 65	45
12 60	8,903 75				8,917 10	46
11 26			126 18		1,192 53	47
26 15	1,817 84		315 33		5,334 97	48
						49
				277 45	277 45	50
1 46			28 71		379 22	51
13 77		136 06	189 12	10 45	2,227 02	52
22 92					22 92	53
						54
			8 60		187 33	55
12 62		158 61	187 71	0 42	2,237 92	56
						57

TABLE 8.—SUMMARY of Operating Expenses

No.	Name of Railway.	68	69	70	71
			TRAFFIC		
			Superintendence.	Outside Agencies.	Advertising.
			$ cts.	$ cts.	$ cts.
58	North Shore Railway Co				
59	Nova Scotia Steel and Coal Co.				
60	Orford Mountain				
61	Ottawa and New York		3,691 18	338 14	165 21
62	Philipsburg Railway and Quarry Co.				
63	Princeton Branch of Washington Co.		83 20	0 78	43 64
64	Père Marquette		17,833 19	17,520 69	3,229 70
65	Quebec Central		6,481 28	8,875 42	4,511 16
66	Quebec and Lake St. John		5,341 94	690 14	3,302 20
67	Quebec Railway, Light and Power Co.		332 42	110 60	519 32
68	Quebec, Montreal and Southern		2,901 37	626 48	50 05
69	Red Mountain		141 89	3 8 46	7 74
70	Rutland and Noyan		120 66	105 08	38 46
71	Salisbury and Harvey				25 30
72	Schomberg and Aurora				
73	Stanstead, Shefford and Chambly		381 49	508 79	204 30
74	St. Clair Tunnel				
75	St. Lawrence and Adirondack		1,330 38	3,220 50	698 74
76	Sydney and Louisburg				214 94
77	Spokane and British Columbia		8 20		1 34
78	Temiscouata		1,766 38	19 09	1,035 52
79	Temiscaming and Northern Ontario		8,087 77		1,399 64
80	Thousand Islands		178 14		82 30
81	Toronto, Hamilton and Buffalo		8,968 58	1,102 22	1,833 51
82	Vancouver, Victoria and Eastern		1,513 52	3,655 17	1,169 67
83	Victoria Terminal Railway and Ferry Co.		54 05		8 23
84	Victoria and Sidney, B.C.		739 94		109 35
85	Wabash Railway Co. (in Canada)		16,583 58	34,836 32	5,945 03
86	Wellington Colliery Co.				
87	York and Carleton				
	Total		789,829 20	1,630,331 55	698,539 25

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for the Year ending June 30, 1909—*Continued.*

72	73	74	75	76	77	
EXPENSES.						
Traffic Associations.	Fast Freight Lines.	Industrial and Immigration Bureaus.	Stationery and Printing.	Other Expenses.	Total Traffic Expenses	No.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
						58
						59
138 25			305 13		443 38	60
57 02			514 71	0 42	4,766 68	61
						62
				16 70	144 32	63
1,140 07	6,320 56		5,180 88	1 64	51,225 73	64
1,071 41			1,185 93	202 23	22,327 43	65
126 60		84 52	1,009 69	10 46	10,565 55	66
14 45			29 00	68 81	1,074 60	67
20 17			532 33	331 50	4,461 90	68
9 64		23 49	81 94	5 30	658 46	69
5 33	67 26		42 66	4 47	383 92	70
			46 55		71 85	71
						72
11 26	597 59	7 67	126 36		1,887 46	73
						74
			18 99		5,268 61	75
					214 94	76
			22 24		31 78	77
129 39					2,950 38	78
92 28			1,337 39	232 61	11,149 69	79
			15 44	7 50	283 38	80
341 28	980 44		1,005 82		14,231 85	81
71 44		363 53	706 49	57 05	7,536 87	82
					62 28	83
					849 29	84
2,141 03	10,362 88	84 00	6,256 44	4 13	76,213 41	85
						86
						87
74,397 04	303,285 09	18,856 06	278,799 24	4,787 14	3,798,824 57	

TABLE 8.—SUMMARY of Operating Expenses for the

No.	Name of Railway.	81	82	83	84	85
			TRANSPORTATION			
			Superintendence.	Despatching Trains.	Station Employees.	Weighing and Car Service Associations
			$ cts.	$ cts.	$ cts.	$ cts.
1	Alberta Railway and Irrigation Co		2,161 76	765 00	11,245 05	
2	Algoma Central and Hudson Bay		5,555 94	690 10	7,475 77	224 04
3	Atlantic and Lake Superior		985 41		4,269 45	
4	Atlantic, Quebec and Western				1,669 65	
5	Bay of Quinté		2,656 76	650 30	8,950 07	
6	Bedlington and Nelson		20 58	10 72		14 21
7	Bessemer and Barry's Bay					1,133 15
8	Brandon, Saskatchewan and Hudson Bay		1,220 23	637 86	7,650 06	501 60
9	British Yukon		2,469 67	2,515 12	13,363 96	
10	Brockville, Westport and Northwestern				2,930 21	
11	Canada Southern		49,220 09	14,620 61	177,662 58	649 51
	Canadian Government Railways :—					
12	Intercolonial		78,138 46	155,704 55	645,484 27	2,087 35
13	Prince Edward Island		5,452 49	3,158 89	45,197 38	
14	Canadian Northern		102,706 65	40,718 83	489,946 08	5,979 22
15	Canadian Northern, Ontario		8,743 48	1,690 42	18,976 59	114 84
16	Canadian Northern, Quebec		9,911 58	3,579 41	42,726 88	228 89
17	Canadian Pacific		651,128 55	420,754 83	3,110,064 83	10,343 03
18	Cape Breton				871 00	
19	Caraquet		800 00	550 00	2,710 00	
20	Carillon and Grenville		560 00		200 00	
21	Central Ontario		1,110 00	816 25	12,219 60	99 54
22	Crowsnest Southern		1,734 74	818 27	5,204 68	1,043 56
23	Cumberland Railway and Coal Co			999 30	3,327 35	
24	Dominion Atlantic		3,962 56	1,979 65	42,788 57	
25	Elgin and Havelock		25 00		408 00	
26	Eastern British Columbia		793 77		390 65	8 81
27	Grand Trunk		186,942 27	82,525 58	1,802,297 06	8,318 35
28	Grand Trunk (Canada Atlantic)		25,346 31	9,743 21	145,165 26	693 28
29	Halifax and Southwestern		8,736 11	1,768 66	14,426 42	50 22
30	Hampton and St. Martin's				165 00	
31	Hereford		375 89	167 30	5,324 21	
32	Inverness Railway and Coal Co		180 40	422 00	4,976 29	3 75
33	Irondale, Bancroft and Ottawa				1,204 62	
34	Kaslo and Slocan		1,516 56		3,130 66	1 66
35	Kent Northern				1,017 00	
36	Kettle River Valley		31 94		30 40	
37	Kingston and Pembroke		1,468 93	1,097 33	11,871 18	78 08
38	Klondike Mines				2,831 60	
39	Liverpool and Milton					
40	Lotbinière and Megantic				663 39	
41	London and Port Stanley		994 42	829 87	11,106 99	103 86
42	Manitoulin and North Shore		2,010 32		41 10	
43	Maritime Coal Railway and Power Co				1,381 63	
44	Massawippi Valley		225 00		17,298 51	
45	Midland Railway Co. of Manitoba		648 59	286 33	5,612 85	661 31
46	Montreal and Atlantic		6,555 11	6,249 37	42,054 59	
47	Montreal and Province Line		572 21	243 09	4,983 24	0 10
48	Montreal and Vermont Junction		1,129 18	729 47	3,486 98	0 25
49	Morrissey, Fernie and Michel		1,830 00		1,752 48	
50	Moncton and Buctouche				1,210 20	
51	Napierville Junction		191 03	117 30	2,228 87	
52	Nelson and Fort Sheppard		1,333 15	677 08	4,347 37	93 87
53	New Brunswick Coal and Railway Co				2,449 12	
54	New Brunswick and P. E. Island		100 00		841 46	
55	New Brunswick Southern		95 95	6 64	2,151 46	

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Year ending June 30, 1909—*Continued.*

86	87	88	89	90	91	92	
EXPENSES.							
Coal and Ore Docks.	Station Supplies and Expenses.	Yardmasters and their Clerks.	Yard Conductors and Brakemen.	Yard Switch and Signal Tenders.	Yard Supplies and Expenses.	Yard Enginemen.	No.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
	914 15		4,175 75			3,695 83	1
22,872 61	385 51	331 21	14,336 33	320 23	65 74	13,812 98	2
	314 06						3
	427 50						4
	2,025 11			123 00	1 21		5
	6 18						6
							7
	1,423 08						8
	1,184 95		591 44			493 45	9
	349 70						10
	13,745 88	45,168 40	98,306 50	15,210 65	23,976 55	64,428 58	11
	97,768 23	35,368 62	129,004 04	11,658 62	15,393 04	111,002 83	12
	6,770 31	2,105 38	1,393 57	379 05	61 40	4,212 48	13
	40,202 56	24,606 02	100,542 65	2,081 50	2,098 55	65,736 15	14
	2,163 49		3,843 36	2 00		2,911 26	15
	4,159 29		7,083 11	610 17	129 65	6,379 63	16
	307,497 40	140,553 44	696,949 38	62,832 67	16,688 23	519,794 92	17
							18
	410 00						19
							20
	1,008 98		1,668 34			713 80	21
	441 33	69 80	764 79			723 35	22
							23
	3,713 30	1,840 38		1 05		6,654 74	24
							25
	126 26						26
Cr. 3,038 49	232,019 95	97,922 24	363,512 05	77,183 67	5,096 20	264,253 10	27
	12,712 43	7,762 61	24,908 04	5,222 44	101 45	20,075 01	28
	2,745 88	340 00	1,135 16		34 83	1,254 72	29
							30
	636 42		211 25	4 85	1 48	1,159 50	31
	474 17		1,485 50			1,331 30	32
	110 00						33
	141 46						34
	25 00						35
							36
	1,275 13		1,253 55			1,315 92	37
	411 25						38
							39
	110 29						40
	405 16	1,691 15	6,382 27	338 67	79 63	3,954 37	41
							42
	4 47						43
	1,163 49		1,710 13			1,663 94	44
	1,074 83						45
	5,980 67	1,625 45	6,701 20	228 16	119 04	4,958 08	46
	1,048 95						47
	519 14	49 86					48
	131 99		9,736 90		868 20	5,926 26	49
							50
	277 78				0 87		51
	386 10						52
							53
							54
	899 95						55

TABLE 8.—SUMMARY of Operating Expenses for the

No.	Name of Railway.	81	82	83	84	85
			TRANSPORTATION			
			Superintendence.	Despatching Trains.	Station Employees.	Weighing and Car Service Associations
			$ cts.	$ cts.	$ cts.	$ cts.
56	New Westminster Southern		1,329 65	790 66	3,401 84	44 93
57	Nosbonsing and Nipissing					
58	North Shore Railway Co		300 00			
59	Nova Scotia Steel and Coal Co				900 00	
60	Orford Mountain				4,701 02	
61	Ottawa and New York		1,675 35	826 81	10,260 11	60 00
62	Philipsburg Railway and Quarry Co					
63	Princeton Branch of Washington Co		166 44	80 11		
64	Père Marquette		13,926 57	5,835 77	72,248 25	1,232 61
65	Quebec Central		5,750 18	4,761 18	56,434 96	542 48
66	Quebec and Lake St. John		10,338 96	3,367 21	25,575 78	182 80
67	Quebec Railway, Light and Power Co		315 00	334 43	824 35	134 49
68	Quebec, Montreal and Southern		2,273 59	1,108 70	18,713 31	
69	Red Mountain		407 22	184 81	3,499 01	112 57
70	Rutland and Noyan		158 92	39 33	536 64	16 82
71	Salisbury and Harvey				1,212 00	
72	Schomberg and Aurora					
73	Stanstead, Shefford and Chambly		693 33	243 47	7,479 07	0 10
74	St. Clair Tunnel		3,416 86	2,555 00		
75	St. Lawrence and Adirondack		192 75		8,457 95	50 58
76	Sydney and Louisburg		1,800 00	4,720 00	13,935 48	5,100 12
77	Spokane and British Columbia		19 60		22 97	
78	Temiscouata		5,010 27	1,291 70	9,271 12	113 29
79	Temiskaming and Northern Ontario		9,549 18	4,247 97	44,146 98	276 50
80	Thousand Islands		567 50	15 08	3,027 60	
81	Toronto, Hamilton and Buffalo		11,794 74	5,986 25	65,417 51	242 31
82	Vancouver, Victoria and Eastern		4,308 34	2,236 25	23,073 70	1,352 02
83	Victoria Terminal Railway and Ferry Co		32 95		206 46	4 71
84	Victoria and Sydney, B.C.		438 95		2,722 54	62 72
85	Wabash Railroad Co. in Canada		14,139 12		18,728 54	4,087 83
86	Wellington Colliery Co					
87	York and Carleton					
	Final total		1,258,246 56	794,148 07	7,144,573 81	46,049 36

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Year ending June 30, 1909—*Continued.*

87	88	89	90	91	92	93	

EXPENSES—*Continued.*

Coal and Ore Docks.	Station Supplies and Expenses.	Yardmasters and Their Clerks.	Yard Conductors and Brakemen.	Yard Switch and Signal Tenders.	Yard Supplies and Expenses.	Yard Enginemen.	No.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
	253 50						56
							57
							58
	90 00						59
	512 14						60
	6,638 38	54 41	346 21	93 79		256 99	61
							62
							63
	6,341 07	3,520 39	14,986 28	766 70	289 95	10,623 78	64
	6,507 15						65
75 87	3,573 60		3,890 16		29 88	3,525 83	66
	580 18	455 30	357 65	675 24	4 00	1,144 55	67
	3,764 83		417 46	304 62	25 67	1,301 08	68
	288 38						69
	144 67	79 82	122 24	936 00	11 28	91 60	70
	20 52						71
							72
	1,465 59	96 00		288 00			73
	104 77			551 50	149 35	1,070 56	74
	2,016 55						75
	190 85	3,696 78		449 00			76
	4 25						77
	951 62						78
	7,278 91	1,856 75	8,297 10	1,641 05	548 11	7,185 25	79
	600 34						80
	4,878 28	4,444 15	14,578 58	1,269 31	56 23	10,379 97	81
	2,524 75	705 00	820 89	39 00	3 50	1,125 41	82
	10 84						83
	140 28						84
	1,547 82		2,125 54			1,670 20	85
			11,433 10		5,848 90		86
							87
19,909 99	798,021 05	374,334 16	1,533,070 52	183,210 94	71,682 94	1,144,827 42	

TABLE 8.—SUMMARY of Operating Expenses for the

Number.	94	95	96	97	98
		TRANSPORTATION			
	NAME OF RAILWAY.	Enginehouse Expenses—Yard.	Fuel for Yard Locomotives	Water for Yard Locomotives	Lubricants for Yard Locomotives
		$ cts.	$ cts.	$ cts.	$ cts.
1	Alberta Railway and Irrigation Co	815 11	4,099 37	521 60	143 65
2	Algoma Central and Hudson Bay	2,022 90	12,035 78	298 16	556 05
3	Atlantic and Lake Superior				
4	Atlantic, Quebec and Western				
5	Bay of Quinté				
6	Bedlington and Nelson				
7	Bessemer and Barry Bay				
8	Brandon, Saskatchewan and Hudson Bay				
9	British Yukon		1,083 24		14 58
10	Brockville, Westport and Northwestern				
11	Canada Southern	22,430 42	80,350 18	4,888 79	2,635 47
12	Canadian Government Railways—Intercolonial	26,850 67	171,310 48	9,563 18	3,951 73
13	" " " —P. E. Island	1,060 77	4,736 67	58 00	106 39
14	Canadian Northern	18,420 69	107,117 25	6,237 32	2,482 94
15	Canadian Northern, Ontario	486 07	2,703 67	28 20	105 61
16	Canadian Northern, Quebec	10 46	17,136 30	330 04	123 86
17	Canadian Pacific	195,285 85	619,237 26	38,937 10	12,880 78
18	Cape Breton				
19	Caraquet	960 00	250 00	100 00	65 00
20	Carillon and Grenville				
21	CentralOntario		1,303 32	72 57	105 15
22	Crowsnest Southern		778 09		
23	Cumberland Railway and Coal Co				
24	Dominion Atlantic	2,805 24	7,841 60	140 41	140 90
25	Elgin and Havelock				
26	Eastern British Columbia				
27	Grand Trunk	48,202 21	275,024 25	13,706 09	4,476 95
28	Grand Trunk (Canada Atlantic)	5,592 18	14,032 54	1,742 32	1,171 46
29	Halifax and Southwestern	71 40	1,877 94		27 66
30	Hampton and St. Martin's				
31	Hereford	455 56	2,069 40	56 72	27 67
32	Inverness Railway and Coal Co	611 05	2,037 82	0 35	89 53
33	Irondale, Bancroft and Ottawa				
34	Kaslo and Slocan				
35	Kent Northern	25 00			
36	Kettle River Valley				
37	Kingston and Pembroke		1,192 40		6 48
38	Klondike Mines				
39	Liverpool and Wilton				
40	Lotbinière and Megantic				
41	London and Port Stanley	1,098 00	4,112 34	179 93	81 37
42	Manitoulin and North Shore				
43	Maritime Coal, Railway and Power Co.				
44	Massawippi Valley		3,199 02	30 48	51 12
45	Midland Railway Co. of Manitoba				
46	Montreal and Atlantic	1,129 76	6,082 49	200 00	
47	Montreal and Province Line	119 27	22 69	53 96	
48	Montreal and Vermont Junction	4 60			
49	Morrissey, Fernie and Michel		9,874 67	281 26	89 40
50	Moncton and Buctouche				
51	Napierville Junction				
52	Nelson and Fort Sheppard				
53	New Brunswick Coal and Railway Co				
54	New Brunswick and P. E. Island				
55	New Brunswick Southern				

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Year ending June 30, 1909—*Continued.*

99	100	101	102	103	104	105	106	
EXPENSES—*Continued.*								
Other Supplies for Yard Locomotives	Total of last Fifteen Accounts.	Operating Joint Yards and Terminals—Dr.	Operating Joint Yards and Terminals—Cr.	Total Station and Yard Expenses.	Motor-men.	Road Enginemen.	Enginehouse Expenses—Road.	Number.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
14 65	25,625 16			25,625 16		9,344 93	2,021 71	1
70 02	74,807 33			74,807 33		6,003 90	1,960 83	2
	4,583 51			4,583 51		4,988 07		3
	2,097 15			2,097 15		1,600 51	720 00	4
	11,099 39	2,600 00		13,699 39		6,948 51	28 25	5
	20 39			20 39		272 87	12 21	6
	1,133 15			1,133 15		869 08	370 25	7
	9,574 74			9,574 74		5,871 60	1,749 60	8
9 06	16,740 68			16,740 68		3,705 27	3,064 31	9
	3,279 91			3,279 91		3,214 10		10
1,259 15	550,712 66	316,122 89	16,764 38	850,071 17		244,280 28	75,879 77	11
2,204 04	1,261,647 10	105,450 33	69,379 01	1,297,518 42		484,255 81	248,481 35	12
146 61	66,228 01			66,228 01		23,115 15	10,724 35	13
2,371 30	867,822 23	19,489 92	14,357 34	872,954 81		484,124 68	202,764 12	14
33 61	31,368 70			31,368 70		21,144 90	9,703 86	15
21 45	78,939 73	1,318 30	347 94	79,910 09		38,656 63	12,346 79	16
16,544 06	5,747,608 95	212,938 14	91,173 61	5,869,373 48		3,099,045 14	1,055,661 72	17
	871 00			871 00		1,957 12		18
72 00	4,567 00			4,567 00		1,220 00		19
	200 00			200 00		280 00		20
	17,191 30	210 00		17,401 30		8,838 66	1,921 22	21
	9,025 60			9,025 60		11,454 28	1,094 69	22
	3,327 35			3,327 35				23
30 11	65,956 30	1,183 50	552 04	66,587 76		27,790 43	11,859 82	24
	408 00			408 00		415 12	391 22	25
	525 72			525 72		1,364 15	449 63	26
7,241 73	3,196,215 36	18,256 42	402,720 68	2,811,751 10		1,125,476 20	264,370 14	27
805 93	239,984 95	3,356 89	10,816 80	232,525 04		97,770 06	25,409 52	28
5 56	21,969 79	552 04		22,521 83		17,768 41	4,767 70	29
	165 00			165 00		967 22	375 00	30
19 54	9,966 60	1,561 59	76 36	11,451 83		4,694 59	1,835 71	31
42 06	11,051 82			11,051 82		5,026 21	1,848 23	32
	1,314 62			1,314 62		1,240 87	476 25	33
	3,273 78			3,273 78		1,399 78	71 73	34
	1,067 00			1,067 00		1,095 00		35
	30 40			30 40		126 76	41 33	36
18 95	17,011 69	2,369 13		20,380 82		7,919 80	4,380 78	37
	3,242 85			3,242 85		2,483 05	588 28	38
	636 59			636 59		1,067 25	84 96	39
	773 68			773 68		1,492 02	456 58	40
14 74	29,548 48			29,548 48		6,052 85	2,604 45	41
	41 10	999 96		1,041 06		2,016 84	794 31	42
	1,386 10			1,386 10			5,222 60	43
	25,116 69	525 00		25,641 69		14,143 62	3,278 85	44
	7,348 99			7,348 99		4,227 70	850 59	45
	69,079 44	30,697 51		99,776 95		48,591 73	12,822 63	46
	6,228 21	255 00		6,483 21		3,562 70	836 79	47
	4,060 83		8 00	4,052 83		4,996 71	70 20	48
1,315 70	29,976 86			29,976 86				49
	1,210 20			1,210 20		1,874 29		50
	2,507 52	125 44	264 12	2,368 84		1,744 76	1,003 92	51
	4,827 34	6,062 68	435 47	10,454 55		4,793 92	639 33	52
	2,449 12			2,449 12		4,462 16		53
	841 46			841 46		2,034 77		54
	3,051 41	1,000 96		4,052 37		3,366 38	257 31	55

TABLE 8.—SUMMARY of Operating Expenses for the

Number.	94	95	96	97	98
		TRANSPORTATION			
	NAME OF RAILWAY.	Enginehouse Expenses—Yard.	Fuel for Yard Locomotives	Water for Yard Locomotives	Lubricants for Yard Locomotives
		$ cts.	$ cts.	$ cts.	$ cts.
56	New Westminster Southern				
57	Nosbonsing and Nipissing				
58	North Shore Railway Co				
59	Nova Scotia Steel and Coal Co				
60	Orford Mountain				
61	Ottawa and New York	60 39	616 30	30 20	15 11
62	Philipsburg Railway and Quarry Co				
63	Princeton Branch of Washington Co				
64	Père Marquette	3,465 53	29,875 99	1,085 16	620 68
65	Quebec Central				
66	Quebec and Lake St. John	1 12	4,700 97	98 29	106 78
67	Quebec Railway, Light and Power Co	61 70	1,292 60	60 70	44 74
68	Quebec, Montreal and Southern	559 17	2,418 90	7 09	49 84
69	Red Mountain				
70	Rutland and Noyan	32 61	165 15	5 80	2 87
71	Salisbury and Harvey				
72	Schomberg and Aurora				
73	Stanstead, Shefford and Chambly	110 78	20 93	48 35	
74	St. Clair Tunnel	643 03	640 08	124 30	412 15
75	St. Lawrence and Adirondack	8 41			
76	Sydney and Louisburg				
77	Spokane and British Columbia				
78	Temiscouata				
79	Temiskaming and Northern Ontario	1,691 75	18,076 00	969 95	258 89
80	Thousand Islands				
81	Toronto, Hamilton and Buffalo	2,039 01	18,783 29	965 41	281 59
82	Vancouver, Victoria and Eastern	285 15	868 62		31 65
83	Victoria Terminal Railway and Ferry Co				
84	Victoria and Sydney, B.C				
85	Wabash Railroad Co. in Canada	5 74	2,702 85		1 00
86	Wellington Colliery Co		3,744 00	48 00	
87	York and Carleton				
	Final Total	337,421 60	1,433,354 45	80,869 73	31,159 05

Year ending June 30, 1909—*Continued.*

99	100	101	102	103	104	105	106	
EXPENSES—*Continued.*								
Other Supplies for Yard Locomotives	Total of last Fifteen Accounts.	Operating Joint Yards and Terminals—Dr.	Operating Joint Yards and Terminals—Cr.	Total Station and Yard Expenses.	Motormen.	Road Enginemen.	Enginehouse Expenses—Road.	Number.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.....	3,700 27	.....	.....	3,700 27	.....	4,927 45	535 45	56
.....	.....	.....	.....	.....	.....	.....	.....	57
.....	.....	.....	.....	.....	.....	1,020 00	.....	58
.....	990 00	.....	.....	990 00	.....	1,480 00	.....	59
.....	5,213 16	.....	.....	5,213 16	.....	3,319 68	62 50	60
15 10	18,446 99	1,588 21	53 33	19,981 87	.....	6,251 11	1,387 88	61
.....	.....	.....	.....	.....	.....	.....	.....	62
.....	.....	.....	.....	.....	.....	1,354 57	566 49	63
84 91	145,141 30	31,042 67	44 37	176,139 60	.....	83,221 40	17,170 46	64
.....	63,484 59	.....	.....	63,484 59	.....	43,352 90	7,195 52	65
34 49	41,795 57	.....	1,921 28	39,874 29	.....	32,687 60	14,151 64	66
11 60	5,647 10	.....	.....	5,647 10	.....	2,961 20	248 23	67
96 73	27,658 70	1,030 00	483 59	28,205 11	.....	9,239 83	4,931 76	68
.....	3,899 96	.....	.....	3,899 96	.....	3,171 28	715 52	69
.....	2,136 50	.....	.....	2,136 50	.....	776 13	212 25	70
.....	1,232 52	.....	.....	1,232 52	.....	2,318 30	126 44	71
.....	.....	.....	.....	.....	.....	.....	.....	72
.....	9,508 82	195 17	.....	9,703 99	.....	3,625 41	763 82	73
207 35	3,903 09	.....	.....	3,903 09	10,599 40	.....	1 93	74
.....	10,533 49	7,877 90	202 32	18,209 07	.....	16,678 27	862 25	75
.....	23,372 23	780 00	.....	24,152 23	.....	29,358 30	9,229 05	76
.....	27 22	.....	.....	27 22	.....	32 32	30 42	77
.....	10,336 03	.....	.....	10,336 03	.....	8,288 20	.....	78
94 52	92,321 76	27,745 07	.....	120,066 83	.....	45,485 33	12,634 13	79
.....	3,627 94	.....	.....	3,627 94	.....	2,272 05	.....	80
192 53	123,528 17	7,153 03	44,193 39	86,487 81	.....	27,157 48	8,156 32	81
23 00	30,792 69	4,779 26	.....	35,571 95	.....	26,936 95	3,756 60	82
.....	216 01	.....	.....	216 01	.....	176 95	24 27	83
.....	2,925 54	.....	.....	2,925 54	.....	2,379 55	322 47	84
0 07	30,869 59	270,822 90	142 16	301,550 33	.....	84,660 18	17,799 53	85
1,274 22	22,348 22	.....	.....	22,348 22	.....	.....	.....	86
.....	.....	.....	.....	.....	.....	1,080 00	.....	87
34,274 79	13,233,396 40	1,079,080 91	654,136 19	13,658,350 12	10,599 40	6,305,369 08	2,075,177 82	

TABLE 8.—SUMMARY of Operating Expenses

	107	108	109	110	111
		TRANSPORTATION			
No.	NAME OF RAILWAY.	Fuel for Road Locomotives	Water for Road Locomotives	Lubricants for Road Locomotives.	Other Supplies for Road Locomotives.
		$ cts.	$ cts.	cts.	$ cts.
1	Alberta Ry. and Irrigation Co.	13,944 91	1,161 95	505 99	135 79
2	Algoma Central and Hudson Bay	15,483 69	976 11	342 99	83 14
3	Atlantic and Lake Superior	17,978 31		844 37	
4	Atlantic, Quebec and Western	5,661 78	52 63	165 80	10 42
5	Bay of Quinté	21,898 31	183 25	188 48	619 69
6	Bedlington and Nelson	148 65	21 85	2 35	1 67
7	Bessemer and Barry's Bay	1,896 22			189 27
8	Brandon, Saskatchewan and Hudson Bay	8,779 32	925 02	49 53	91 61
9	British Yukon	8,381 44	873 70	116 49	55 89
10	Brockville, Westport and Northwestern	7,002 25	205 00	325 45	
11	Canada Southern	567,167 39	31,148 10	12,252 97	4,465 00
	Canadian Government Railways—				
12	Intercolonial	1,534,673 51	48,096 01	24,254 07	14,279 22
13	Prince Edward Island	46,329 80	2,481 72	1,121 64	963 04
14	Canadian Northern	1,212,092 79	68,831 40	28,619 12	27,026 33
15	Canadian Northern, Ontario	54,063 34	3,482 16	2,254 00	877 94
16	Canadian Northern, Quebec	157,348 07	5,065 61	3,665 00	1,147 86
17	Canadian Pacific	7,013,011 58	383,321 57	96,764 61	166,217 77
18	Cape Breton	2,125 66		158 68	
19	Caraquet	8,086 00	200 00	365 00	115 00
20	Carillon and Grenville				417 25
21	Central Ontario	22,609 35	657 50	509 75	14 60
22	Crowsn est Southern	16,590 09	1,047 49	268 62	195 86
23	Cumberland Ry. and Coal Co	8,570 00	79 50	64 49	1,088 58
24	Dominion Atlantic	77,584 23	1,969 96	1,429 41	339 57
25	Elgin and Havelock	21,116 92	19 50	185 96	76 94
26	Eastern British Columbia	693 35		48 16	96 18
27	Grand Trunk	3,437,024 38	123,472 33	32,207 21	46,763 01
28	Grand Trunk (Canada Alantic)	295,614 90	12,210 01	5,880 27	3,882 25
29	Halifax and Southwestern	67,095 06	2,285 22	1,351 99	307 33
30	Hampton and St. Martins	2,058 60		46 58	35 22
31	Hereford	11,026 56	465 62	117 92	161 14
32	Inverness Ry. and Coal Co	13,313 83	297 37	647 05	265 28
33	Irondale, Bancroft and Ottawa	5,561 34		298 26	766 06
34	Kaslo and Slocan	1,877 45	119 35	61 73	26 18
35	Kent Northern	2,000 00	25 00	100 00	100 00
36	Kettle River Valley	91 84	10 52	2 17	20 12
37	Kingston and Pembroke	19,123 49	729 00	493 63	272 61
38	Klondike Mines	7,367 46	344 72	277 35	45 05
39	Liverpool and Milton	1,740 71	25 00	65 03	51 15
40	Lotbinière and Megantic	3,988 40	22 50	222 13	16 83
41	London and Port Stanley	23,208 46	1,101 07	363 59	243 54
42	Manitoulin and North Shore	3,489 94	185 75	51 69	12 77
43	Maritime Coal, Railway and Power Co.	7,032 05	171 97	713 95	133 86
44	Massawippi Valley	27,191 73	259 12	434 57	149 40
45	Midland Railway Co. of Manitoba	5,790 14	791 09	58 30	59 95
46	Montreal and Atlantic	126,180 67	1,930 94	1,558 71	2,398 29
47	Montreal and Province Line	17,398 78	1,069 66	208 98	155 18
48	Montreal and Vermont Junction	18,967 05	806 59	162 24	80 60
49	Morrisey, Fernie and Michel				
50	Moncton and Buctouche	3,088 15		281 86	
51	Napierville Junction	10,450 79	938 36	165 54	38 65
52	Nelson and Fort Sheppard	14,266 91	316 33	187 50	202 90
53	New Brunswick Coal and Railway Co.	8,561 15	84 33	851 44	
54	New Brunswick and Prince Edward Island.	4,049 28	50 00	122 84	
55	New Brunswick Southern	9,141 19	94 68	225 03	98 73
56	New Westminster Southern	13,691 68	40 22	85 40	105 34

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for the Year ending June 30, 1909—*Continued.*

112	113	114	115	116	117	118	
EXPENSES—*Continued.*							
Operating Power Plants.	Road Trainmen.	Train Supplies and Expenses.	Interlockers, Block and other Signals—Operation.	Crossing Flagmen and Gatemen.	Drawbridge Operation.	Clearing Wrecks.	No.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.....	11,057 21	630 98	.....	.....	.....	137 46	1
.....	8,126 81	1,633 76	.....	.....	.....	276 66	2
.....	4,710 00	132 00	.....	.....	.....	.....	3
.....	2,340 24	198 76	.....	.....	.....	2 62	4
.....	7,150 29	416 26	2,024 62	.....	.....	480 53	5
.....	308 32	.....	.....	.....	.....	119 38	6
.....	480 00	.....	.....	.....	.....	.....	7
.....	6,257 73	2,137 25	6,786 30	.....	.....	8 41	8
.....	4,826 37	617 97	.....	.....	.....	99 06	9
.....	3,270 42	109 49	.....	.....	.....	.....	10
.....	258,621 39	41,843 62	45,723 00	5,156 55	1,875 07	1,729 46	11
.....	639,795 54	182,843 91	15,019 86	13,042 95	3,898 76	19,160 92	12
.....	32,468 58	5,884 42	.....	5 60	703 75	99 41	13
.....	475,205 84	138,600 37	19,746 95	802 25	892 98	47,978 87	14
.....	18,492 56	11,673 81	3,295 69	637 50	1,265 82	2,516 51	15
.....	33,970 36	9,706 45	3,969 90	2,407 02	.....	3,818 07	16
.....	3,209,990 34	1,303,328 15	80,550 58	21,079 45	6,764 08	193,910 15	17
.....	1,413 25	27 31	.....	.....	.....	.....	18
.....	2,160 00	374 00	.....	.....	.....	125 00	19
.....	206 75	.....	.....	.....	.....	.....	20
.....	8,460 98	791 85	.....	2,199 07	.....	214 24	21
.....	11,230 22	2,582 79	.....	.....	.....	2,211 76	22
.....	.....	.....	.....	.....	.....	.....	23
.....	39,772 95	11,681 75	114 50	.....	1,433 34	271 36	24
.....	1,571 17	.....	.....	.....	.....	.....	25
.....	999 45	16 32	.....	.....	.....	51 73	26
Cr. 16 00	1,091,790 44	297,182 11	21,280 92	60,305 65	11,617 39	27,435 45	27
.....	99,022 73	28,168 97	Cr. 321 42	3,277 56	3,080 74	7,921 10	28
.....	16,133 57	6,698 80	1 77	160 00	174 26	729 38	29
.....	1,457 78	.....	.....	.....	.....	.....	30
.....	6,193 00	782 12	16 08	0 01	.....	203 58	31
.....	5,932 76	1,706 82	.....	.....	.....	90 60	32
.....	1,270 21	260 29	.....	.....	.....	.....	33
.....	2,132 30	13 77	.....	.....	.....	33 57	34
.....	.....	2,291 00	.....	.....	.....	.....	35
.....	178 40	18 90	.....	.....	.....	.....	36
.....	9,125 67	2,306 82	732 00	.....	.....	210 51	37
.....	2,247 15	310 06	.....	.....	.....	.....	38
.....	883 50	.....	.....	.....	.....	.....	39
.....	1,861 43	20 00	.....	.....	.....	.....	40
.....	7,125 55	668 37	.....	670 51	.....	295 37	41
.....	2,100 09	212 07	.....	.....	.....	.....	42
.....	3,760 35	133 19	.....	.....	.....	.....	43
.....	15,391 20	2,042 18	.....	.....	.....	.....	44
.....	4,400 37	1,168 43	7,085 04	.....	.....	104 47	45
.....	44,809 36	7,701 96	2,449 56	.....	.....	1,682 10	46
.....	4,109 72	1,223 84	.....	.....	315 00	283 81	47
.....	2,871 46	1,092 17	.....	.....	240 00	83 95	48
.....	.....	.....	1,252 00	.....	.....	502 62	49
.....	1,608 40	.....	.....	.....	.....	.....	50
.....	1,788 91	305 14	842 64	.....	.....	140 81	51
.....	5,315 32	1,758 41	.....	.....	.....	409 87	52
.....	6,577 54	.....	.....	.....	.....	.....	53
.....	2,008 40	201 33	.....	102 00	.....	.....	54
.....	4,467 47	898 93	.....	4 31	153 15	1,177 23	55
.....	5,808 93	1,872 42	787 05	16 00	.....	805 76	56

TABLE 8.—SUMMARY of Operating Expenses

No.	107 NAME OF RAILWAY.	108 TRANSPORTATION Fuel for Road Locomotives	109 TRANSPORTATION Water for Road Locomotives	110 TRANSPORTATION Lubricants for Road Locomotives.	111 TRANSPORTATION Other Supplies for Road Locomotives.
		$ cts.	$ cts.	$ cts.	$ cts.
57	Nosbonsing and Nipissing				
58	North Shore Railway Co.	612 75		47 01	
59	Nova Scotia Steel and Coal Co.	1,686 63			132 00
60	Orford Mountain	5,053 51	348 25	287 40	36 57
61	Ottawa and New York	14,803 55	767 87	496 84	88 92
62	Philipsburg Railway and Quarry Co.				
63	Princeton Branch of Washington Co.	1,826 92		25 98	19 38
64	Père Marquette	231,221 03	8,702 43	3,646 47	2,447 95
65	Quebec Central	134,764 00		3,373 37	378 11
66	Quebec and Lake St. John	123,239 33	6,184 31	2,093 25	1,413 37
67	Quebec Railway, Light and Power Co.	8,178 59	177 04	224 81	95 62
68	Quebec, Montreal and Southern	34,085 16	1,562 76	901 15	659 59
69	Red Mountain	5,067 81	248 63	55 05	38 61
70	Rutland and Noyan	1,142 18	51 10	37 78	15 03
71	Salisbury and Harvey	6,228 67		137 26	35 02
72	Schomberg and Aurora				
73	Stanstead, Shefford and Chambly	15,889 86	649 34	176 71	172 11
74	St. Clair Tunnel	8 00	Cr. 23 06	18 65	Cr. 1 54
75	St. Lawrence and Adirondack	53,481 19	404 51	751 20	542 57
76	Sydney and Louisburg	31,781 02	3,802 52	1,915 22	576 89
77	Spokane and British Columbia	83 24	10 34	1 76	5 42
78	Temiscouata	31,457 70	1,169 14	442 49	
79	Temiskaming and Northern Ontario	148,746 82	11,193 87	2,832 91	1,370 41
80	Thousand Islands	4,461 65	21 16	72 77	101 89
81	Toronto, Hamilton and Buffalo	64,204 62	3,222 65	908 69	728 32
82	Vancouver, Victoria and Eastern	58,197 31	2,717 53	729 59	619 21
83	Victoria Terminal Railway and Ferry Co.	347 40	10 20	9 81	0 56
84	Victoria and Sydney, B. C.	4,615 71	152 45	137 24	1 83
85	Wabash Railroad Co. in Canada	144,581 85	6,574 88	4,927 35	3,080 64
86	Wellington Colliery Co.				
87	York and Carleton	700 00		70 00	10 00
	Final Total	16,111,095 45	746,594 70	245,976 65	287,462 54

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for the Year ending June 30, 1909—*Continued.*

112	113	114	115	116	117	118	
EXPENSES—*Continued.*							
Operating Power Plants	Road Trainmen.	Train Supplies and Expenses.	Interlockers, Block and other Signals—Operation.	Crossing Flagmen and Gatemen.	Drawbridge Operation.	Clearing Wrecks.	No.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.....	.....	.....	.....	.....	.....	.....	57
.....	.....	.....	.....	79 30	.....	.....	58
.....	1,007 00	30 80	.....	.....	.....	.....	59
.....	2,542 80	265 64	.....	.....	.....	2 01	60
.....	7,396 54	1,231 96	3,015 84	.....	132 30	82 38	61
.....	.....	.....	.....	.....	.....	.....	62
.....	798 83	176 13	.....	.....	.....	.....	63
.....	87,860 26	24,921 65	2,864 41	1,413 61	406 72	1,484 11	64
.....	42,222 00	7,945 09	.....	.....	.....	658 86	65
.....	34,774 69	9,987 37	79 14	1,129 68	1,166 56	506 37	66
.....	2,671 66	615 69	.....	.....	180 58	26 67	67
.....	9,423 89	9,284 44	1,814 71	13 40	592 90	252 29	68
.....	3,623 93	430 02	.....	.....	.....	172 41	69
.....	677 31	201 29	5 58	.....	.....	12 85	70
.....	1,784 30	139 47	.....	.....	.....	14 35	71
.....	.....	.....	.....	.....	.....	.....	72
.....	3,392 37	1,758 85	.....	.....	665 18	530 21	73
27,207 62	10,011 49	18 73	.....	.....	.....	.....	74
.....	17,340 21	1,375 00	1,533 59	.....	.....	391 11	75
.....	25,823 32	2,484 22	.....	360 00	.....	.....	76
.....	33 82	.....	1 60	.....	.....	.....	77
.....	9,127 05	1,728 46	.....	.....	.....	551 43	78
1,323 53	46,70 81	11,172 08	.....	.....	.....	5,322 76	79
.....	1,185 69	142 47	.....	.....	.....	4 35	80
.....	28,116 93	15,466 72	2,085 13	3,943 42	.....	1,176 00	81
.....	25,695 92	5,502 63	613 83	921 00	1,754 56	1,503 94	82
.....	136 16	21 97	.....	.....	.....	13 55	83
.....	1,806 24	296 70	.....	.....	.....	180 08	84
.....	86,553 63	32,072 48	.....	.....	.....	2,004 73	85
.....	.....	.....	.....	.....	.....	.....	86
.....	600 00	10 00	.....	.....	.....	.....	87
28,515 15	6,584,565 63	2,201,549 18	223,370 27	117,726 84	37,313 14	330,212 24	

TABLE 8.—SUMMARY of Operating Expenses

Number.	120 Name of Railway.	121 Transportation — Telegraph and Telephone—Operation.	122 Transportation — Operating Floating Equipment.	123 Transportation — Express Service.	124 Transportation — Stationery and Printing.
		$ cts.	$ cts.	$ cts.	$ cts.
1	Alberta Ry. and Irrigation Co	765 00		240 00	2,227 16
2	Algoma Central and Hudson Bay	1,073 35			850 79
3	Atlantic & Lake Superior	150 50			427 30
4	Atlantic, Quebec & Western	14 25			6 65
5	Bay of Quinté	36 90			680 73
6	Bedlington & Nelson				
7	Bessemer & Barry's Bay				
8	Brandon, Sask. & Hudson Bay	214 34			276 07
9	British Yukon	1,443 54			567 09
10	Brockville, Westport & Northwestern	144 80			366 71
11	Canada Southern	19,954 71	124,036 90		18,687 97
12	Canadian Govt. Rys.—Intercolonial	8,277 54	40,527 14		55,991 57
13	" P.E. Island	6,456 87	819 97		5,636 70
14	Canadian Northern				38,728 66
15	Canadian Northern, Ontario	3 20			3,387 00
16	Canadian Northern, Quebec				3,966 39
17	Canadian Pacific	109,375 80	36,205 41		192,272 09
18	Cape Breton				139 15
19	Caraquet				215 00
20	Carillon & Grenville				
21	Central Ontario	15 42			545 43
22	Crowsnest Southern	355 42			350 13
23	Cumberland Ry. & Coal Co				
24	Dominion Atlantic	54 59			2,992 56
25	Elgin & Havelock				42 90
26	Eastern British Columbia	2 52			737 07
27	Grand Trunk	31,635 04	96,354 26		92,302 82
28	Grand Trunk (Canada Atlantic)	1,457 26			8,443 81
29	Halifax & Southwestern	214 49		5,852 94	3,442 22
30	Hampton & St. Martins				
31	Hereford	2 15	0 08		221 25
32	Inverness Ry. & Coal Co	76 66			243 67
33	Irondale, Bancroft & Ottawa				
34	Kaslo & Slocan	63 91		120 00	59 31
35	Kent Northern		75 00		
36	Kettle River Valley				5 60
37	Kingston & Pembroke				839 50
38	Klondike Mines				92 03
39	Liverpool & Milton				
40	Lotbinière & Megantic				102 13
41	London & Port Stanley	431 00			710 73
42	Manitoulin and North Shore	3 00			79 64
43	Maritime Coal Railway and Power Co				61 70
44	Massawippi Valley				634 54
45	Midland Railway Co. of Manitoba	83 83			152 72
46	Montreal and Atlantic	120 99			3,645 56
47	Montreal and Province Line	71 03			329 29
48	Montreal and Vermont Junction	158 88			825 54
49	Morrissey, Fernie and Michel				
50	Moncton and Buctouche				
51	Napierville Junction	448 53		217 12	30 92
52	Nelson and Fort Sheppard	454 61			201 88
53	New Brunswick Coal and Railway Co				
54	New Brunswick and Prince Edward Island				
55	New Brunswick Southern				299 59
56	New Westminster Southern	113 60			222 03
57	Nosbonsing and Nipissing				

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for the Year ending June 30, 1909—*Continued.*

125	126	127	128	129	130	131	
EXPENSES—*Continued.*							
Other Expenses.	Loss and Damage —Freight.	Loss and Damage— Baggage.	Damage to Property.	Damage to Stock on Right of Way.	Injuries to Persons.	Total of Last Twenty-six Accounts.	Number.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts	$ cts.	
229 19	125 14			170 00	63 00	42,760 42	1
114 05	2 73	3 00		0 87	1 50	36,934 18	2
2,663 19	51 36					31,945 10	3
43 00	44 92				25 00	10,886 58	4
5,138 87	220 07			13 00		46,027 76	5
				103 80	0 36	991 46	6
				20 00	272 60	4,097 42	7
77 69	99 62	1 81	78 88	137 98	75 41	33,618 17	8
1,766 88	6 51				25 96	25,550 48	9
453 37	140 14			27 50		15,259 23	10
224 03	43,906 41	323 19	2,594 57	127 00	27,472 52	1,527,469 90	11
22,076 83	32,776 93	272 69	4,851 93	2,771 99	19,569 14	3,414,917 67	12
	440 05	Cr. 0 25	62 88	80 50	277 41	137,671 59	13
2,328 06	47,631 99	488 42	7,118 74	2,028 78	16,197 40	2,821,207 75	14
459 40	396 53	74 67	2,334 58	2,005 03	413 24	138,481 14	15
2,414 13	4,613 14	1,253 09	2,328 95	1,871 79	106 23	288,655 48	16
29,667 92	506,084 35	14,559 82	56,605 29	23,806 56	361,233 93	17,958,856 31	17
17 43		516 62	30 00			6,385 22	18
525 00	53 20					13,438 20	19
						904 06	20
4,024 31	194 48		485 06	33 00		51,514 92	21
76 12	225 18	Cr. 7 39	686 57	952 71	282 54	49,597 08	22
						9,802 57	23
341 02	18 35	131 00	213 50	50 00	970 00	179,018 34	24
74 34	0 80		75 00			4,969 87	25
	2 52					4,461 08	26
95,835 20	246,063 60	3,255 45	21,016 39	13,741 65	137,806 50	7,276,920 14	27
2,515 26	16,916 40	31 79	3,533 39	1,362 23	6,117 03	622,293 86	28
4,819 45	1,697 42	161 50	15 91	20 00	1,035 05	134,732 47	29
						,940 40	30
	247 02	7 59	578 34	27 32	826 69	27,406 57	31
	7 91			10 00		29,466 39	32
951 92						10,825 20	33
3 95	12 15					5,995 18	34
						5,686 00	35
1 09						496 73	36
156 25	596 22		72 75	112 00	134 25	47,205 28	37
340 44	14 05		96 00			14,205 64	38
	33 75					3,951 35	39
1,939 42						10,115 44	40
15 68	1,183 59		309 95	67 64	1,805 30	46,857 65	41
					140 00	9,086 10	42
94 28	82 35	85 00				17,491 30	43
	957 78				274 02	64,757 01	44
30 15	14 89	Cr. 1 43	65 12	99 29	74 38	25,055 03	45
155 39	9,895 11		6,871 17	378 25	4,221 23	275,413 65	46
	1,193 72	70 00	971 50	59 00	303 99	32,162 99	47
	1,262 20	33 27	567 60	577 63	65 02	32,861 11	48
						1,754 62	49
314 41	37 43			9 00		7,213 54	50
32 37				5 00		18,153 46	51
56 49	418 97	Cr. 3 59	4 68	646 30	739 76	30,409 59	52
4,673 75	81 93		157 95		15 30	25,465 55	53
	6 80			131 00		8,706 42	54
15 27	25 57		56 15	130 28	248 43	20,659 70	55
70 86	214 47	1 39	3,448 70	1,217 84	2,047 70	36,012 29	56
							57

TABLE No. 8.—SUMMARY of Operating Expenses

Number.	120	121	122	123	124
	NAME OF RAILWAY.	TRANSPORTATION			
		Telegraph and Telephone—Operation.	Operating Floating Equipment.	Express Service.	Stationery and Printing.
		$ cts.	$ cts.	$ cts.	$ cts.
58	North Shore Railway Co.				
59	Nova Scotia Steel and Coal Co.				
60	Orford Mountain				344 18
61	Ottawa and New York	1,871 88			946 16
62	Philipsburg Railway and Quarry Co.				
63	Princeton Branch of Washington Co.				1 88
64	Père Marquette	5,016 80	19,332 34		7,344 56
65	Quebec Central	2,420 95			3,388 69
66	Quebec and Lake St. John		0 20		2,399 28
67	Quebec Railway, Light and Power Co.				488 61
68	Quebec, Montreal and Southern				1,947 93
69	Red Mountain	382 71			77 81
70	Rutland and Noyan	13 63			55 57
71	Salisbury and Harvey				
72	Schomberg and Aurora				
73	Stanstead, Shefford and Chambly	139 35			332 65
74	St. Clair Tunnel	12 36			131 41
75	St. Lawrence and Adirondack				923 64
76	Sydney and Louisburg				
77	Spokane and British Columbia				14 93
78	Temiscouata				1,441 18
79	Temiskaming and Northern Ontario	17,285 19			7,279 12
80	Thousand Islands	50 80		102 60	130 25
81	Toronto, Hamilton and Buffalo	481 85			4,932 19
82	Vancouver, Victoria and Eastern	1,373 04	10,975 22		744 09
83	Victoria Terminal Railway and Ferry Co		3,119 83		
84	Victoria and Sydney, B.C				
85	Wabash Railroad Co. in Canada	3,600 45			4,185 80
86	Wellington Colliery Co.				
87	York and Carleton				
	Final total	216,322 74	331,446 35	6,532 66	479,151 53

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for the Year ending June 30, 1909—*Continued.*

126	127	128	129	130	131	132	
EXPENSES—*Continued.*							
Other Expenses.	Loss and Damage —Freight.	Loss and Damage—Baggage.	Damage to Property.	Damage to Stock on Right of Way.	Injuries to Persons.	Total of Last Twenty-six Accounts.	Number.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.....	.....	.....	.....	.....	.....	1,759 06	58
.....	.....	.....	.....	.....	.....	4,336 43	59
32 73	29 74	.....	.....	70 95	.....	12,395 96	60
38 28	801 63	14 15	2,654 88	118 34	579 50	42,590 01	61
.....	.....	.....	.....	.....	.....	.....	62
.....	51 21	6 21	.....	.....	.....	4,827 60	63
9,902 64	26,702 34	Cr. 14 77	2,640 85	1,094 36	18,639 65	556,019 27	64
28,043 52	1,157 07	45 70	363 60	483 50	1,144 50	276,937 38	65
1,323 23	1,303 04	293 12	1,455 00	61 00	451 60	234,699 78	66
193 88	.....	.....	9 63	37 61	.....	16,109 82	67
211 78	1,756 27	.....	3,800 95	120 15	3,314 15	83,913 11	68
10 25	47 02	.....	27,382 64	36 59	77 34	41,537 62	69
1 33	87 00	.....	.....	6 22	.....	3,295 25	70
18 61	35 00	.....	.....	.....	.....	10,837 42	71
.....	.....	.....	.....	.....	.....	.....	72
.....	388 09	2 80	727 62	153 00	442 19	29,809 56	73
.....	.....	.....	.....	.....	3 00	47,987 99	74
28 24	1,670 89	3 29	839 52	865 04	4,168 00	101,858 52	75
855 84	.....	.....	.....	.....	.....	106,186 38	76
.....	.....	.....	.....	.....	.....	213 25	77
89 59	194 75	.....	732 75	120 00	149 67	55,492 32	78
3,191 87	1,792 40	Cr. 48 95	3,170 42	365 69	2,706 50	322,524 89	79
1,761 69	7 50	.....	.....	20 00	.....	10,334 87	80
287 63	3,284 52	.....	306 48	516 20	4,314 80	169,289 95	81
186 26	482 78	150 88	1,002 98	1,016 10	2,481 21	147,361 63	82
.....	3 91	.....	.....	9 20	.....	3,873 81	83
.....	42 26	.....	.....	122 25	.....	10,056 78	84
8,600 84	46,939 57	264 17	3,164 84	1,614 88	35,698 14	486,323 96	85
.....	.....	.....	.....	.....	.....	.....	86
.....	.....	.....	.....	.....	.....	2,470 00	87
238,914 58	1,004,774 74	21,973 64	163,483 71	59,626 02	657,011 14	38,484,765 20	

TABLE No. 8.—SUMMARY of Operating Expenses

Number.	133	134	135	136	138	139
		TRANSPORTATION EXPENSES—*Continued.*				
	NAME OF RAILWAY.	Operating Joint Tracks. — Dr.	Operating Joint Tracks. — Cr.	Total Movement Expenses.	Total Transportation Expenses.	Salaries and Expenses of General Officers.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1	Alberta Ry. and Irrigation Co			68,385 58	71,312 34	10,282 00
2	Algoma Central and Hudson Bay			111,741 51	117,987 55	3,034 19
3	Atlantic and Lake Superior			36,528 61	37,514 02	2,000 00
4	Atlantic, Quebec and Western			12,983 73	12,983 73	1,359 00
5	Bay of Quinté	5,200 00		64,927 15	68,234 21	4,261 93
6	Bedlington and Nelson			1,011 85	1,043 15	62 88
7	Bessemer and Barry's Bay			5,230 57	5,230 57	1,900 00
8	Brandon, Saskatchewan and Hudson Bay			43,192 91	45,051 00	587 60
9	British Yukon			42,291 16	47,275 95	3,849 62
10	Brockville, Westport and Northwestern			18,539 14	18,539 14	4,720 00
11	Canada Southern	23,015 04	24,256 26	2,376,299 85	2,440,140 55	29,405 37
	Canadian Government Rys.—					
12	Intercolonial	12,928 12		4,725,364 21	4,959,207 22	17,375 65
13	Prince Edward Island			203,899 60	212,510 98	1,599 26
14	Canadian Northern			3,694,162 56	3,837,588 04	29,703 36
15	Canadian Northern, Ontario	16,446 00		186,295 84	196,729 74	4,134 75
16	Canadian Northern, Quebec	300 00	302 45	368,563 12	382,054 11	5,173 73
17	Canadian Pacific	22,942 21	5,914 05	23,845,257 95	24,917,141 33	282,276 80
18	Cape Breton			7,256 22	7,256 22	2,792 80
19	Caraquet			18,005 20	19,355 20	3,330 00
20	Carillon and Grenville			1,104 00	1,664 00	
21	Central Ontario			68,916 22	70,842 47	3,237 30
22	Crowsnest Southern			58,622 68	61,175 69	750 04
23	Cumberland Ry. and Coal Co.			13,129 92	14,129 22	
24	Dominion Atlantic			245,606 10	251,548 31	15,475 27
25	Elgin and Havelock			5,377 87	5,402 87	382 76
26	Eastern British Columbia			4,986 80	5,780 57	24 05
27	Grand Trunk	12,682 57	150,586 06	9,950,767 75	10,220,235 60	171,419 10
28	Grand Trunk (Canada Atlantic)	558 11	712 50	854,664 51	889,754 03	7,850 76
29	Halifax and Southwestern			157,254 30	167,759 07	5,259 26
30	Hampton and St. Martins			5,105 40	5,105 40	360 00
31	Hereford		18 58	38,839 82	39,383 01	341 37
32	Inverness Ry. and Coal Co			40,518 21	41,120 61	2,587 74
33	Irondale, Brancroft and Ottawa			12,139 82	12,139 82	4,792 80
34	Kaslo and Slocan			9,268 96	10,785 52	14 90
35	Kent Northern			6,753 00	6,753 00	1,200 00
36	Kettle River Valley			527 13	559 07	36 51
37	Kingston and Pembroke			67,586 10	70,152 36	4,186 57
38	Klondike Mines			17,448 49	17,448 49	7,990 60
39	Liverpool and Milton			4,587 94	4,587 94	
40	Lotbinière and Megantic			10,889 12	10,889 12	3,898 45
41	London and Port Stanley	82 49	2,436 44	74,052 18	75,876 47	655 73
42	Manitoulin and North Shore			10,127 16	12,137 48	1,561 71
43	Maritime Coal, Ry. & Power Co.			18,877 40	18,877 40	2,674 00
44	Massawippi Valley			90,398 70	90,623 70	579 88
45	Midland Railway Co. of Manitoba			32,404 02	33,338 94	249 07
46	Montreal and Atlantic	41 23		375,231 83	388,036 31	
47	Montreal and Province Line			38,646 20	39,461 50	371 14
48	Montreal and Vermont Junction		15 10	36,898 84	38,757 49	1,048 42
49	Morrissey, Fernie and Michel			31,731 48	33,561 48	3,478 11
50	Moncton and Buctouche			8,423 74	8,423 74	1,800 00
51	Napierville Junction		3 01	20,519 29	20,827 62	735 61
52	Nelson and Fort Sheppard	37 54		40,901 68	42,911 91	460 62
53	New Brunswick Coal and Ry. Co.			27,914 67	27,914 67	3,264 57

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for the Year ending June 30, 1909—*Continued.*

140	141	142	143	144	145	146	
General Expenses.							
Salaries and Expenses of Clerks and Attendants.	General Office Supplies and Expenses.	Law Expenses.	Insurance.	Relief Department Expenses.	Pensions.	Stationery and Printing.	Number.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
3,772 23	2,156 04	678 91	2,868 06			1,000 60	1
2,981 06	2,033 31	2,038 91	3,394 82	445 38		504 53	2
1,839 80	482 39		391 35			480 63	3
881 45	539 28		211 97			55 60	4
729 37	170 55	1,504 80	2,516 95			4 00	5
12 94		236 59	162 34				6
	67 80	129 10					7
1,194 59	85 04	197 14	1,240 06			133 07	8
3,326 66	1,972 27	1,075 57	1,299 50			299 14	9
445 00	840 40	1,125 00	178 50			105 92	10
50,914 58	2,365 95	29,573 54	3,693 94		140 00	4,789 41	11
98,261 79	3,554 26	8,630 21		8,000 00	69,682 14	11,618 88	12
5,440 96	382 20	151 39		3,999 13		613 31	13
96,440 29	12,835 66	41,241 02	93,696 28			13,854 79	14
7,468 73	1,723 56	2,296 03	7,602 04			987 98	15
8,696 34	2,687 55	9,421 05	14,045 70			1,646 57	16
427,016 27	77,944 67	206,414 63	299,598 00			71,201 83	17
	86 48		300 12				18
	510 00	41 00				204 39	19
	10 00					20 00	20
974 76	1,185 90	30 00	996 34			108 59	21
1,537 03	96 03	1,850 79	2,054 98			163 52	22
8,115 66	3,808 92	2,736 67	4,261 43	90 00		1,336 78	23
	31 68	75 00	43 50			54 06	24
120 57	3 25					136 60	25
220,850 95	45,637 76	107,859 70	80,236 66	17,226 50	110,961 90	26,972 26	26
18,763 52	2,230 91	6,330 03	2,138 92		1,958 00	1,673 00	27
6,948 38	730 92	3,206 79	2,790 59			1,003 34	28
360 00						191 25	29
598 34	36 79	343 46	884 81	0 70	18 12	101 52	30
2,904 24	1,099 54	112 64	600 96			439 72	31
399 81	80 00					125 00	32
360 00	1 72		291 85			31 07	33
391 00							34
25 99	26 46	1 78	29 83			33 89	35
514 04	17 03	604 32	1,963 50			117 45	36
2,422 50	815 66	57 00	315 00			161 06	37
360 00	97 00						38
920 91	19 63	38 60				68 31	39
2,422 15	172 49	696 67	754 19			188 16	40
1,533 67	717 10	1,433 00	363 26	180 00		174 88	42
						114 56	43
2,055 66	53 76	1,720 09	465 81				44
645 29	34 98	110 42	1,148 02			65 54	45
17,855 23		3,681 43	2,972 63				46
861 71	40 00	134 78	282 03			106 11	47
2,027 54	98 93	212 38	705 02			265 01	48
2,080 80	38 50	8 75	158 99			175 62	49
	271 13					178 20	50
658 13	168 62	62 88				154 17	51
887 62	59 11	1,085 84	450 32			90 77	52
1,282 55		2 00	101 24			483 29	53

TABLE 8.—SUMMARY of Operating Expenses

Number.	Name of Railway.	133	134	135	136	137	138
			TRANSPORTATION EXPENSES—*Continued.*				
			Operating Joint Tracks. — Dr.	Operating Joint Tracks. — Cr.	Total Movement Expenses.	Total—Transportation Expenses.	Salaries and Expenses of General Officers.
			$ cts.	$ cts.	$ cts.	$ cts	$ cts.
54	New Brunswick and P. E. Island				9,547 88	9,647 88	1,302 86
55	New Brunswick Southern		61 50		24,773 57	24,876 16	2,846 08
56	New Westminster Southern				39,712 56	41,832 87	490 39
57	Nosbonsing and Nipissing				12,348 77	12,348 77	
58	North Shore Railway Co				1,759 06	2,059 06	
59	Nova Scotia Steel and Coal Co				5,326 43	5,326 43	
60	Orford Mountain				17,609 12	17,609 12	2,590 00
61	Ottawa and New York		1,602 56		64,174 44	66,676 60	975 56
62	Philipsburg Ry. and Quarry Co.						25 00
63	Princeton Branch of Washington Co.				4,827 60	5,074 15	6 36
64	Père Marquette		22,396 55	12 43	754,542 99	774,305 33	6,866 12
65	Quebec Central				340,421 97	350,933 33	16,250 81
66	Quebec and Lake St. John		331 00	399 66	274,505 41	288,211 58	4,169 69
67	Quebec Ry., Light & Power Co.				21,756 92	22,406 35	823 90
68	Quebec, Montreal and Southern		2 70	2,660 14	109,460 78	112,843 07	6,744 82
69	Red Mountain				45,437 58	46,029 61	184 53
70	Rutland and Noyan				5,431 75	5,630 00	181 94
71	Salisbury and Harvey				12,069 94	12,069 94	1,578 80
72	Schomberg and Aurora						
73	Stanstead, Shefford & Chambly,			1 12	39,512 43	40,449 23	374 69
74	St. Clair Tunnel				51,891 08	57,862 94	
75	St. Lawrence and Adirondack		41,045 23		161,112 82	161,305 57	1,195 54
76	Sydney and Louisburg				130,338 61	136,858 61	
77	Spokane and British Columbia				240 47	260 07	52 85
78	Temiscouata				65,828 35	72,130 32	5,559 39
79	Temiskaming & Northern Ontario				442,591 72	456,388 87	8,246 13
80	Thousand Islands				13,962 81	14,545 39	2,876 53
81	Toronto, Hamilton and Buffalo		999 42	463 74	256,313 44	274,094 43	9,902 78
82	Vancouver, Victoria and Eastern				182,933 58	189,478 17	1,604 31
83	Vancouver Terminal & Ferry Co.				4,089 82	4,122 77	
84	Victoria and Sidney, B.C.				12,982 32	13,421 27	
85	Wabash Railroad Co. in Canada		103,880 06	42 10	891,712 25	905,851 37	9,643 93
86	Wellington Colliery Co				22,348 22	22,348 22	
87	York and Carleton				2,470 00	2,470 00	
	Final Total		264,552 33	187,823 64	52,232,192 78	54,284,587 41	739,028 29

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for the Year euding June 30, 1909.—*Continued.*

139	140	141	142	143	144	145	
General Expenses.							
Salaries and Expenses of Clerks and Attendants.	General Office Supplies and Expenses.	Law Expenses.	Insurance.	Relief Department Expenses.	Pensions.	Stationery and Printing.	Number.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
250 00	50 00					15 00	54
650 92	149 90	154 35	671 00		277 20	54 74	55
959 19	70 60	534 47	429 44			100 31	56
							57
	63 66						58
							59
275 00	295 10		16 80			45 64	60
1,643 06	646 31	1,412 04	753 55			184 44	61
6 00							62
182 63		89 18	23 89			12 13	63
27,092 68	1,772 63	7,224 69	6,610 29			1,9 6 62	64
7,452 55	1,759 26	302 75	7,200 00		5,244 90	562 12	65
8,199 23	1,708 42	2,961 75	3,163 84			877 70	66
989 94	346 67	32 95	1,173 73			151 20	67
6,039 69	1,635 62	596 25	1,416 00			885 64	68
380 78	24 44	2,809 73	287 85			41 61	89
147 35	19 98	78 50				22 72	70
		226 10	54 50			8 50	71
							72
819 95	40 02	164 18	282 03			106 04	73
50 00			3,135 90				74
3,682 96	405 71	1,196 99	288 80			142 40	75
1,967 00	39,784 00						76
20 95	38 62	1 61				35 69	77
1,384 50	972 79	418 85	1,428 44			310 13	78
11,087 61	2,600 86	2,723 55	16,732 99			1,120 41	79
301 85	24 95	72 21	496 76			2 97	80
9,377 38	806 85	3,038 58	1,899 50			526 76	81
3,289 61	200 32	4,782 57	4,042 74			544 03	82
120 05	19 95	315 14				44 68	83
1,595 50	264 96	0 23				593 96	84
30,584 09	5,373 65	14,636 18	7,707 75			2,525 73	85
							86
			35 00			25 00	87
1,126,730 58	227,096 59	480,924 76	593,060 31	29,941 71	188,282 26	152,916 01	

TABLE 8.—SUMMARY of Operating Expenses

No.	147 Name of Railway.	148	149	150	151
		General Expenses—*Continued.*			
		Other Expenses.	Total of Foregoing Accounts.	General Administration, Joint Tracks, Yards and Terminals. Dr.	General Administration, Joint Tracks, Yards and Terminals. Cr.
		$ cts.	$ cts.	$ cts.	$ cts.
1	Alberta Railway and Irrigation Co.	271 07	21,029 91		
2	Algoma Central and Hudson Bay	3,103 47	17,535 67		
3	Atlantic and Lake Superior	2,391 89	7,586 06		
4	Atlantic Quebec and Western	352 82	3,400 12		
5	Bedlington and Nelson	3 00	477 75		
6	Bay of Quinte	126 87	9,314 47		
7	Bessemer and Barry's Bay	50 00	2,146 90		
8	Brandon, Saskatchewan and Hudson Bay	263 84	3,701 34		
9	British Yukon	81 01	11,903 77		
10	Brockville, Westport and Northwestern	45 25	7,460 07		
11	Canada Southern	2,159 81	123,042 60	1,200 00	
12	Canadian Gov't. Railways (Intercolonial).	4,849 35	221,972 28		
13	" (P. E. Island)		12,186 25		
14	Canadian Northern	20,537 43	308,308 83		
15	Canadian Northern, Ontario	63 04	24,276 13		
16	Canadian Northern, Quebec	5,396 95	47,067 89		
17	Canadian Pacific	149,685 69	1,514,137 89	101 41	
18	Cape Breton	87 40	3,266 80		
19	Caraquet		4,085 39		
20	Carillon and Grenville	15 53	45 53		
21	Central Ontario		6,532 89		
22	Crowsnest Southern	6,725 76	13,178 15		
23	Cumberland Railway and Coal Co.				
24	Dominion Atlantic	9,245 52	45,070 25		
25	Elgin and Havelock	204 87	791 87		
26	Eastern British Columbia		284 47		
27	Grand Trunk	21,639 08	802,803 91		462 88
28	Grand Trunk (Canada Atlantic)	2,357 89	43,303 03		12 57
29	Halifax and Southwestern	4,967 18	24,906 46		
30	Hampton and St. Martin's		851 25		
31	Hereford	100 07	2,425 18		
32	Inverness Railway and Coal Co.	846 84	8,591 68		
33	Irondale, Bancroft and Ottawa	116 41	5,514 02		
34	Kaslo and Slocan	5 00	704 54		
35	Kent Northern		1,591 00		
36	Kettle River Valley	14 33	168 79		
37	Kingston and Pembroke	1,798 69	9,201 60		
38	Klondike Mines	703 49	12,465 31		
39	Liverpool and Milton		597 00		
40	Lotbinière and Megantic	1,168 93	6,114 83	10 00	
41	London and Port Stanley	192 66	5,082 05		114 73
42	Manitoulin and North Shore	1,891 75	7,855 37		
43	Maritime Coal, Railway and Power Co.	93 01	2,881 57		
44	Massawippi Valley		4,875 20		
45	Midland Railway Co. of Manitoba	144 74	2,398 06		
46	Montreal and Atlantic	800 00	25,309 29		
47	Montreal and Province Line	29 66	1,825 43		
48	Montreal and Vermont Junction	83 74	4,441 04		
49	Morrissey, Fernie and Michel	2,590 88	8,531 65	11,741 30	
50	Moncton and Buctouche	647 23	2,896 56		
51	Napierville Junction	263 10	2,042 51		
52	Nelson and Fort Sheppard	186 28	3,220 56		
53	New Brunswick Coal and Railway Co.	4,970 89	10,104 54		
54	New Brunswick and Prince Edward Island		1,617 86		
55	New Brunswick Southern		4,804 19		

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for the Year ending June 30, 1909—*Continued.*

153	154	155	156	157	158	160	
	Recapitulation of Expenses.						
Total General Expenses.	Maintenance of Way and Structures.	Maintenance of Equipment.	Traffic Expenses.	Transportation Expenses.	General Expenses.	Total Operating Expenses.	No.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
21,029 91	84,266 70	29,868 34	.....	71,312 34	21,029 91	206,477 29	1
17,535 67	35,054 46	52,341 73	2,321 37	117,987 55	17,535 67	225,240 78	2
7,586 66	28,361 12	20,300 26	.....	37,514 02	7,586 06	93,761 46	3
3,400 12	6,530 66	1,140 73	.....	12,983 73	3,400 12	24,055 24	4
477 75	4,005 79	228 98	.....	1,043 15	477 75	5,755 67	5
9,314 47	25,109 98	25,594 29	3,435 52	68,234 21	9,314 47	131,688 47	6
2,146 90	3,134 45	1,475 75	.....	5,230 57	2,146 90	11,987 67	7
3,701 34	31,884 61	9,059 22	2,791 19	45,051 00	3,701 34	92,487 36	8
11,903 77	50,312 11	16,028 31	5,822 84	47,275 95	11,903 77	131,342 98	9
7,460 07	9,930 69	3,375 52	.....	18,539 14	7,460 07	39,305 42	10
124,242 60	817,334 60	945,987 72	208,287 66	2,440,140 55	124,242 60	4,535,993 13	11
221,972 28	1,642,398 07	2,040,823 69	188,120 72	4,959,207 22	221,972 28	9,052,521 98	12
12,186 25	115,084 02	70,398 58	966 33	212,510 98	12,186 25	411,146 16	13
308,308 83	1,405,212 68	1,193,677 18	128,722 35	3,837,588 04	308,308 83	6,873,509 08	14
24,276 13	88,711 75	53,636 22	14,860 35	196,729 74	24,276 13	378,214 19	15
47,067 89	162,407 22	77,073 63	9,724 37	382,054 11	47,067 89	678,327 22	16
1,514,239 30	9,875,550 33	10,882,347 97	2,075,170 05	24,917,141 33	1,514,239 30	49,264,448 98	17
3,266 80	5,444 07	1,640 09	.....	7,256 22	3,266 80	17,607 18	18
4,085 39	20,767 40	8,699 25	1,172 00	19,355 20	4,085 39	54,079 24	19
45 53	1,951 00	1,115 00	.....	1,664 00	45 53	4,775 53	20
6,532 89	49,379 54	16,751 76	2,324 70	70,842 47	6,532 89	145,831 36	21
13,178 15	142,174 85	17,272 97	3,483 50	61,175 69	13,178 15	237,285 16	22
.....	21,183 01	12,394 87	3,208 65	14,129 22	.....	50,915 75	23
45,070 25	117,513 79	60,164 98	24,109 95	251,548 31	45,070 25	498,407 28	24
791 87	5,837 56	890 33	1 75	5,402 87	791 87	12,924 38	25
284 47	4,729 33	1,507 71	5 00	5,780 57	284 47	12,507 08	26
802,341 03	3,672,594 40	3,878,960 53	825,933 43	10,220,235 60	802,341 03	19,400,064 99	27
43,290 46	377,750 99	282,039 24	39,463 26	889,754 03	43,290 46	1,632,297 98	28
24,906 46	114,047 68	41,246 68	9,718 53	167,759 07	24,906 46	357,678 42	29
851 25	4,129 98	588 84	146 40	5,105 40	851 25	10,821 87	30
2,425 18	27,504 97	11,190 62	660 23	39,383 01	2,425 18	81,164 01	31
8,591 68	37,692 41	27,385 15	338 78	41,120 61	8,591 68	115,128 63	32
5,514 02	10,308 19	5,015 77	....	12,139 82	5,514 02	32,977 80	33
704 54	10,419 08	2,747 01	.....	10,785 52	704 54	24,656 15	34
1,591 00	3,920 00	300 00	75 00	6,753 00	1,591 00	12,639 00	35
168 79	1,817 35	160 83	39 03	559 07	168 79	2,745 07	36
9,201 60	47,717 54	21,344 91	1,729 80	70,152 36	9,201 60	150,146 21	37
12,465 31	16,238 56	2,671 96	515 51	17,448 49	12,465 31	49,339 83	38
397 00	873 12	2,222 49	.....	4,587 94	397 00	8,080 55	39
6,124 83	9,941 67	2,752 10	.....	10,889 12	6,124 83	29,707 72	40
4,967 32	33,323 65	18,396 79	4,955 06	75,876 47	4,967 32	137,519 29	41
7,855 37	7,781 64	5,611 57	251 00	12,137 48	7,855 37	33,637 06	42
2,881 57	5,720 16	5,167 26	.....	18,877 40	2,881 57	32,646 39	43
4,875 20	37,664 50	14,736 96	1,367 37	90,623 70	4,875 20	149,267 73	44
2,398 06	35,129 65	7,082 64	1,571 65	33,338 94	2,398 06	79,520 94	45
25,309 29	213,446 68	116,557 79	8,917 10	388,036 31	25,309 29	752,267 17	46
1,825 43	20,809 19	1,0?2 49	1,192 53	39,461 50	1,825 43	64,291 14	47
4,441 04	15,736 06	847 98	5,334 97	33,757 49	4,441 04	65,117 54	48
20,272 95	11,227 46	11,224 88	.....	33,561 48	20,272 95	76,286 77	49
2,896 56	8,410 33	2,336 27	277 45	8,423 74	2,896 56	22,344 35	50
2,042 51	5,446 84	1,726 24	379 22	20,827 62	2,042 51	30,422 43	51
3,220 56	53,109 71	8,622 32	2,227 02	42,911 91	3,220 56	110,091 52	52
10,104 54	23,174 26	14,758 09	22 92	27,914 67	10,104 54	75,974 48	53
1,617 86	10,555 08	4,964 85	.....	9,647 88	1,617 86	28,785 67	54
4,804 19	29,205 41	10,213 67	187 33	24,876 16	4,804 19	69,286 76	55

TABLE 8.—Summary of Operating Expenses

No.	147 Name of Railway.	148	149	150	151
		General Expenses—*Continued.*			
		Other Expenses.	Total of Foregoing Accounts.	General Administration Joint Tracks, Yards, and Terminals. Dr.	General Administration Joint Tracks, Yards, and Terminals. Cr.
		$ cts.	$ cts.	$ cts.	$ cts.
56	New Westminster Southern	243 33	2,827 73		
57	Nosbonsing and Nipissing				
58	North Shore Railway		63 66		
59	Nova Scotia Steel and Coal Co.				
60	Orford Mountain		3,222 54		
61	Ottawa and New York	127 74	5,742 70	0 98	
62	Philipsburg Railway and Quarry Co.		31 00		
63	Princeton Branch of Washington Co. Ry. (U.S.)	13 89	328 08		
64	Père Marquette	1,990 15	53,492 58	0 29	377 49
65	Quebec Central	22,111 07	60,884 46		
66	Quebec and Lake St. John	12,664 28	33,744 91		
67	Quebec Railway, Light and Power Co.	3,661 43	7,179 82	50 49	
68	Quebec, Montreal and Southern	481 15	17,799 17		
69	Red Mountain	83 41	3,812 35		
70	Rutland and Noyan	9 88	460 37		
71	Salisbury and Harvey	45 68	1,913 58		
72	Schomberg and Aurora				
73	Stanstead, Shefford and Chambly	29 75	1,816 66		
74	St. Clair Tunnel		3,185 90		
75	St. Lawrence and Adirondack	127 53	7,039 99		
76	Sydney and Louisburg		41,751 00		
77	Spokane and British Columbia	20 54	170 26		
78	Temiscouata	45 60	10,119 70	540 00	
79	Temiskaming and Northern Ontario	1,098 55	43,610 10		
80	Thousand Islands	64 27	3,839 54		
81	Toronto, Hamilton and Buffalo	1,032 26	26,584 11		
82	Vancouver, Victoria and Eastern	690 72	14,954 30		
83	Victoria Terminal Railway and Ferry Co.	17 45	517 27		
84	Victoria and Sydney, B.C.	5 00	2,459 65		
85	Wabash Railway Company in Canada	913 40	71,384 73	5,693 68	
86	Wellington Colliery Co				
87	York and Carleton		60 00		
	Final Total	296,749 50	3,834,723 92	19,338 15	967 67

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for the Year ending June 30, 1909—*Continued.*

153	156	155	156	157	158	160	
RECAPITULATION OF EXPENSES.							
Total General Expenses.	Maintenance of Way and Structures.	Maintenance of Equipment.	Traffic Expenses.	Transportation Expenses.	General Expenses.	Total Operating Expenses.	No.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
2,827 73	18,268 54	7,114 58	2,237 92	41,832 87	2,827 73	72,281 64	56
.....	7,455 88	3,494 95	.....	12,348 77	.....	23,299 60	57
63 66	631 80	137 99	.....	2,059 06	63 66	2,892 51	58
.....	3,923 80	2,018 30	.....	5,326 43	.....	11,268 53	59
3,222 54	14,055 97	2,665 81	443 38	17,609 12	3,222 54	37,996 82	60
5,743 68	97,251 05	16,492 97	4,766 68	66,676 60	5,743 68	190,930 98	61
31 00	216 00	.....	.....	.....	31 00	247 00	62
328 08	3,059 40	1,220 12	144 32	5,074 15	328 08	9,826 07	63
53,115 38	167,930 32	329,704 31	51,226 73	774,305 33	53,115 38	1,376,282 07	64
60,884 46	152,669 43	138,103 60	22,327 43	350,933 33	60,884 46	724,918 25	65
33,744 91	109,596 99	111,091 12	10,565 55	288,211 58	33,744 91	553,210 15	66
7,230 31	4,902 37	6,337 34	1,074 60	22,406 35	7,230 31	41,950 97	67
17,799 17	60,437 73	33,768 55	4,461 90	112,843 07	17,799 17	229,310 42	68
3,812 35	14,668 81	4,178 06	658 46	46,029 61	3,812 35	69,347 29	69
460 37	1,297 22	1,749 15	383 92	5,630 00	460 37	9,520 66	70
1,913 58	16,340 78	7,069 80	71 85	12,069 94	1,913 58	37,465 95	71
.....	.....	.....	.....	.....	.....	.....	72
1,816 66	22,919 42	2,808 52	1,837 46	40,449 23	1,816 66	69,831 29	73
3,185 90	23,120 35	22,521 65	.....	57,862 94	3,185 90	106,690 84	74
7,039 99	68,849 40	31,027 11	5,268 61	161,305 57	7,039 99	273,490 68	75
41,751 00	54,239 21	99,652 90	214 94	136,858 61	41,751 00	332,716 66	76
170 26	1,117 08	140 39	31 78	260 07	170 26	1,719 58	77
10,659 70	51,082 56	31,029 45	2,950 38	72,130 32	10,659 70	167,852 41	78
43,610 10	133,165 17	126,868 82	11,149 69	456,388 87	43,610 10	771,182 65	79
3,839 54	3,641 95	2,960 53	283 38	14,545 39	3,839 54	25,270 79	80
26,584 11	135,509 06	71,637 28	14,231 85	274,094 43	26,584 11	522,056 73	81
14,954 30	133,559 80	36,489 04	7,536 87	189,478 17	14,954 30	382,018 18	82
517 27	694 75	332 49	62 28	4,122 77	517 27	5,729 56	83
2,459 65	9,165 38	4,431 81	849 29	13,421 27	2,459 65	30,327 40	84
77,078 41	226,300 33	360,000 93	76,213 41	905,851 37	77,078 41	1,645,444 45	85
.....	15,841 56	9,275 01	.....	22,348 22	.....	47,464 79	86
60 00	1,396 00	310 00	.....	2,470 00	60 00	4,236 00	87
3,853,094 40	21,153,274 46	21,510,303 59	3,798,824 57	54,284.587 41	3,853,094 40	104.600,084 43	

TABLE 9.—SUMMARY of Passengers and Tons Carried, Earnings, Expenses, Train Mileage and Mileage Operated for the Year ending June 30, 1909.

No.	1 NAME OF RAILWAY.	2 Passengers Carried.	3 Passengers Carried One Mile.	4 Mileage of Revenue Passenger Trains.	5 Mileage of Revenue Mixed Trains.	6 Total Passenger Revenue.	7 Total Passenger Earnings.
		No.	No.	Miles.	Miles.	$ cts.	$ cts.
1	Alberta Railway and Irrigation Co	46,379	1,984,906		68,921	73,407 51	80,991 99
2	Algoma Central and Hudson Bay	14,959	497,199	2,450	32,391	16,931 57	17,010 02
3	Atlantic and Lake Superior	22,755	750,915	9,500	54,540	26,527 29	31,199 40
4	Atlantic, Quebec and Western	13,519	198,896		13,758	6,155 82	6,174 72
5	Bay of Quinte	81,946	1,423,089		165,438	32,335 43	41,163 97
6	Bedlington and Nelson	410	2,734		1,253	110 65	162 09
7	Bessemer and Barry's Bay						
8	Brandon, Saskatchewan and Hudson Bay	31,311	959,719	43,904		26,115 82	29,070 96
9	British Yukon	8,802	776,336	546	55,800	73,183 34	81,012 52
10	Brockville, Westport and Northwestern	67,180	2,015,400	28,800	27,700	27,343 60	32,192 98
11	Canada Southern	1,029,481	81,541,013	1,521,040	132,279	1,795,938 73	2,240,967 19
12	Canadian Government—Intercolonial	2,933,754	141,495,515	2,795,492	487,881	2,512,487 61	3,004,490 57
13	" " —P. E. Island	331,777	7,758,271		333,764	136,167 50	166,308 82
14	Canadian Northern	1,028,787	78,041,255	1,528,299	494,479	1,829,703 25	2,107,160 82
15	Canadian Northern, Ontario	105,182	5,733,319	276,935	27,800	118,126 89	130,601 71
16	Canadian Northern, Quebec	332,893	10,169,158	235,257	53,092	198,745 57	224,877 60
17	Canadian Pacific	9,507,645	1,043,121,841	13,995,096	1,775,683	19,617,914 78	22,374,718 57
18	Cape Breton	7,572	170,816		19,530	4,988 60	5,319 32
19	Caraquet	12,523	465,283		140,649	12,215 20	14,747 80
20	Carillon and Grenville	3,833	46,567		2,522	1,532 85	1,532 85
21	Central Ontario	148,047	3,613,411	276,772		71,642 04	84,815 61
22	Crowsnest Southern	16,860	448,412	49,097		16,974 29	19,102 46
23	Cumberland Railway and Coal Co	32,529	515,035	61,405	614,615	13,669 11	18,079 57
24	Dominion Atlantic	347,435	15,634,575	305,363	191,240	333,899 89	388,686 60
25	Elgin and Havelock	10,494	136,422		18,720	2,845 46	3,521 54
26	Eastern British Columbia	2,888	33,582		2,952	1,897 40	1,953 65
27	Grand Trunk	10,142,211	456,882,404	7,629,652	489,585	8,413,069 94	10,017,218 98
28	Grand Trunk, Canada Atlantic	501,868	17,596,319	513,066	135,129	378,817 36	440,297 31
29	Halifax and Southwestern	181,873	7,405,487	59,207	223,111	160,949 24	188,444 60
30	Hampton and St. Martin's	7,781	141,976		6,500	4,253 04	4,784 54
31	Hereford	28,396	693,797	33,611	21,062	15,393 03	18,792 54
32	Inverness Railway and Coal Co	36,383	833,173		42,156	21,785 40	23,157 62

33	Irondale, Bancroft and Ottawa	10,751	190,140		31,300	5,514 06	6,716 94
34	Kaslo and Slocan	2,227	39,160		7,187	2,510 23	3,140 12
35	Kent Northern	8,200	221,400		6,858	6,576 59	7,702 17
36	Kettle River Valley	144	2,081		839	82 45	82 45
37	Kingston and Pembroke	74,091	1,407,729	48,309	96,042	45,685 49	56,103 70
38	Klondike Mines	4,065	91,580		9,920	13,361 50	13,481 50
39	Liverpool and Milton	5,200	21,000		5,100	444 50	444 50
40	London and Port Stanley	153,701	2,683,345	69,221	11,797	30,423 69	36,495 21
41	Lotbinière and Megantic	12,270	173,881		18,900	4,424 10	5,818 50
42	Manitoulin and North Shore	5,768	33,447	445	6,225	1,552 15	1,552 15
43	Maritime Coal, Railway and Power Co	22,194	195,333		18,474	6,272 13	7,090 15
44	Massawippi Valley	161,215	2,958,116	79,362	4,420	65,435 04	69,775 13
45	Midland Railway of Manitoba	12,633	365,583	232	32,400	8,585 37	9,760 00
46	Moncton and Buctouche	20,151	428,011		22,208	8,888 85	9,986 07
47	Montreal and Atlantic	298,298	7,473,903	136,420	161,390	169,929 99	197,177 32
48	Montreal and Province Line	158,786	2,353,356	52,977	16,198	44,910 18	51,214 77
49	Montreal and Vermont Junction	121,905	2,571,382	64,538		47,848 32	55,335 48
50	Morrissey, Fernie and Michel	112,500	686,250		25,977	7,952 25	7,952 25
51	Napierville Junction Railway	10,315	144,408	406	16,956	4,043 45	4,381 49
52	Nelson and Fort Sheppard	19,060	611,247	37,020	18,273	21,778 17	27,566 67
53	New Brunswick Coal and Railway Co	24,219	588,450		63,914	16,704 44	18,613 23
54	New Brunswick and Prince Edward Island	23,709	411,615	4,370	25,080	9,306 65	11,011 83
55	New Brunswick Southern	16,882	686,558		52,324	16,415 72	19,472 30
56	New Westminster Southern	75,868	1,420,304	40,785	5,232	45,213 53	51,116 12
57	North Shore	1,807	14,456	4,800	4,800	361 38	361 38
58	Nosbousing and Nipissing				8,155		
59	Nova Scotia Steel and Coal Co	8,234	65,872		15,650	1,936 73	2,248 73
60	Orford Mountain	15,236	243,776	23,788	28,240	6,229 00	7,173 10
61	Ottawa and New York	109,223	2,704,413	76,809		59,320 34	67,204 22
62	Père Marquette (in Canada)	307,261	6,064,109	271,781	8,159	122,825 68	152,220 65
63	Philipsburg Railway and Quarry Co				3,114		
64	Princeton Branch of Washington Co. Railway	78,494	409,319	3,762	6,335	7,076 65	7,720 82
65	Quebec Central	343,487	15,076,611	214,607	229,208	319,179 86	356,622 21
66	Quebec and Lake St. John	352,419	11,805,355	221,768	43,531	222,987 11	258,149 59
67	Quebec Railway, Light and Power Co	113,582	583,811	7,342	277	11,676 23	11,676 23
68	Quebec, Montreal and Southern	266,918	4,220,689	59,072	144,550	99,630 35	110,833 48
69	Red Mountain	9,331	83,565	138	6,570	2,902 13	3,917 48
70	Rutland and Noyan	114,934	389,626	4,688		8,645 80	8,883 16
71	Salisbury and Harvey	14,627	323,504		37,116	9,079 10	11,917 69
72	Schomberg and Aurora						
73	Stanstead, Shefford and Chambly	168,822	1,201,167	45,579	16,816	27,480 40	34,970 81
74	St. Clair Tunnel						
75	St. Lawrence and Adirondack	286,095	9,435,146	154,359		163,423 81	174,295 26
76	Sydney and Louisburg (Dom. Coal Co.)	50,542	675,639	33,712		15,964 22	19,296 57
77	Spokane and British Columbia Railway	633	2,341		407	58 98	58 98
78	Temiscouata	84,578	2,848,690	74,208	70,134	74,264 06	83,508 32
79	Temiscaming and Northern Ontario	574,963	19,785,303	276,353	11,077	487,439 74	526,459 38
80	Thousand Islands	31,161	186,966		33,661	7,712 02	10,819 20
81	Toronto, Hamilton and Buffalo	421,984	11,840,342	256,932		238,109 11	254,483 01
82	Vancouver, Victoria and Eastern	122,153	2,421,464	74,781	35,865	75,490 78	86,131 82

TABLE 9.—SUMMARY of Passengers and Tons Carried, Earnings, Expenses, Train Mileage, and Mileage Operated, for the Year ending June 30, 1909—*Continued.*

No.	1 NAME OF RAILWAY.	2 Passengers Carried.	3 Passengers Carried one mile.	4 Mileage of Revenue Passenger Trains.	5 Mileage of Revenue Mixed Trains.	6 Total Passenger Revenue.	7 Total Passenger Earnings.
		No.	No.	Miles.	Miles.	$ cts.	$ cts.
83	Victoria and Sydney, B.C.	68,428	841,231	7,046	15,211	19,822 05	20,247 18
84	Victoria Terminal and Ferry Co.	68,428	78,008	494	1,081	2,057 08	2,089 11
85	Wabash Railway Co. (in Canada)	567,304	34,743,601	683,134	12,333	556,135 42	595,410 17
86	Wellington Colliery Co.	5,390	57,942	.....	31,200	3,093 75	3,353 75
87	York and Carleton	5,350	56,175	.....	8,490	1,600 00	1,845 00
	Total	32,683,309	2,033,001,225	32,295,730	7,061,580	39,073,488 84	45,282,326 27

TABLE 9.—SUMMARY of Passengers and Tons Carried, Earnings, Expenses, Train Mileage and Mileage Operated for the Year ending June 30, 1909—*Continued.*

Number.	8	9	10	11	12	13	14	15	16	17	18
	NAME OF RAILWAY.	Tons Carried.	Tons Carried One Mile.	Mileage of Revenue Mixed Trains.	Mileage of Revenue Freight Trains.	Total Freight Revenue.	Total Freight Earnings.	Total Revenue Train Mileage.	Total Gross Earnings.	Total Operating Expenses.	Mileage Operated on June 30
		Number.	Number.	Miles.	Miles.	$ cts.	$ cts.	Miles.	$ cts.	$ cts.	Miles.
1	Alberta Ry. and Irrigation Co	150,985	7,374,129	68,921	18,271	199,090 01	200,588 01	87,192	294,278 38	206,477 29	111.82
2	Algoma Central and Hudson Bay	362,808	8,299,286	32,391	10,926	138,534 21	229,181 24	45,767	304,730 94	225,240 78	89.64
3	Atlantic and Lake Superior	37,931	1,362,797	54,540	31,600	59,009 02	59,009 02	95,640	93,553 18	93,761 46	100.00
4	Atlantic, Quebec and Western	13,270	217,685	13,758	.....	9,690 94	10,637 04	14,538	16,826 59	24,055 24	20.50
5	Bay of Quinté	141,775	4,321,255	165,438	.....	108,020 27	108,020 27	165,438	153,652 92	131,688 47	89.37
6	Bedlington and Nelson	2,500	17,335	1,253	5	1,583 08	1,583 08	1,258	1,745 17	5,755 67	23.97
7	Bessemer and Barry's Bay	21,369	106,845	.....	4,080	3,107 80	3,107 80	4,080	3,107 80	11,987 67	5.00
8	Brandon, Sask., & Hudson Bay	72,658	2,929,920	.....	24,485	39,471 33	39,843 93	68,599	68,940 11	92,487 36	69.45
9	British Yukon	23,953	2,135,410	55,800	900	239,083 02	239,083 02	57,246	326,612 09	131,342 98	90.32
10	Brockville, Westport and Northwestern	21,913	657,390	27,700	360	25,575 54	25,575 54	57,150	57,768 52	39,305 42	45.00
11	Canada Southern	5,955,251	996,611,016	132,279	1,900,138	5,432,730 84	5,492,113 81	3,555,968	7,766,465 51	4,535,993 13	382.19
	Canadian Government—										
12	Intercolonial	3,552,739	954,639,260	487,881	3,568,680	5,491,237 76	5,543,349 67	6,762,053	8,602,986 51	9,052,521 98	1,450.37
13	P. E. Island	111,440	3,888,055	333,764	.....	152,495 86	155,838 28	333,764	323,084 25	411,146 16	269.33
14	Canadian Northern	2,958,802	1,000,875,386	491,479	2,544,380	7,370,376 28	7,488,670 83	4,570,041	10,581,767 93	6,873,509 08	3,096.42
15	Canadian Northern, Ontario	201,296	17,478,374	27,800	108,430	194,049 85	194,733 43	413,165	332,553 88	378,214 19	332.73
16	Canadian Northern, Quebec	485,819	39,158,817	53,092	172,030	489,665 31	498,250 06	462,735	739,603 34	678,327 22	266.80
17	Canadian Pacific	15,701,276	6,069,787,049	1,775,683	18,381,652	46,502,875 28	46,774,714 79	34,198,180	70,438,424 42	49,264,448 98	9,608.30
18	Cape Breton	3,496	64,913	19,530	.....	2,606 15	2,606 15	19,530	8,013 87	17,607 18	31.00
19	Caraquet	24,793	1,115,685	140,649	.....	37,282 64	37,282 64	140,649	52,030 44	54,079 24	84.78
20	Carillon and Grenville	55	715	2,522	.....	78 16	78 16	2,522	2,508 61	4,775 53	13.00
21	Central Ontario	231,431	6,709,578	.....	623,469	163,472 41	163,472 41	900,211	267,437 60	145,831 36	149.73
22	Crowsnest Southern	242,492	13,575,849	.....	44,475	157,025 49	157,469 86	84,624	178,387 34	237,285 16	74.18
23	Cumberland Ry and Coal Co.	378,431	6,257,427	614,615	.....	86,159 03	86,159 03	676,020	104,238 60	50,915 75	32.00
24	Dominion Atlantic	334,588	16,729,400	191,240	56,763	405,541 32	405,703 82	555,884	796,774 27	498,407 28	278.87
25	Elgin and Havelock	15,253	213,542	18,720	.....	10,118 07	10,118 07	18,720	13,644 61	12,924 38	28.00
26	Eastern British Columbia	19,097	210,824	2,952	.....	4,725 93	5,000 93	2,952	6,959 58	12,307 08	14.00
27	Grand Trunk	14,518,691	2,619,838,880	489,585	8,642,566	17,454,561 79	17,662,990 52	16,780,281	28,024,007 29	19,400,064 99	3,108.44
28	Grand Trunk, Canada Atlantic	2,258,587	225,532,097	135,129	624,597	1,301,246 60	1,320,882 82	1,273,143	1,813,945 46	1,632,297 98	456.26
29	Halifax and Southwestern	185,063	10,003,175	223,111	24,451	177,132 20	181,056 70	309,992	372,782 62	357,678 42	369.81
30	Hampton and St. Martin's	16,106	236,658	6,500	.....	8,017 91	8,175 56	6,500	12,974 41	10,821 87	30.00
31	Hereford	128,982	3,205,225	21,062	20,011	45,329 18	45,828 68	74,714	64,870 15	81,164 01	52.85

TABLE 9.—SUMMARY of Passengers and Tons Carried, Earnings, Expenses, Train Mileage, and Mileage Operated for the Year ending June 30, 1909—*Continued.*

Number.	19 NAME OF RAILWAY.	20 Tons Carried.	21 Tons Carried One Mile.	22 Mileage of Revenue Mixed Trains.	23 Mileage of Revenue Freight Trains.	24 Total Freight Revenue.	25 Total Freight Earnings.	26 Total Revenue Train Mileage.	27 Total Gross Earnings.	28 Total Operating Expenses.	29 Mileage Operated on June 30.
		Number.	Number.	Miles.	Miles.	$ cts.	$ cts.	Miles.	$ cts.	$ cts.	Miles.
32	Inverness Ry. and Coal Co.	275,100	14,888,307	42,156	55,249	162,927 84	162,927 84	97,405	187,220 22	115,128 63	61.00
33	Irondale, Bancroft and Ottawa	32,032	908,335	31,300	.....	20,241 50	20,241 50	31,300	26,958 41	32,977 80	48.00
34	Kaslo and Slocan	11,645	215,596	7,187	.....	13,826 17	13,861 17	7,187	17,010 29	24,656 15	23.37
35	Kent Northern	8,949	241,623	6,858	.....	9,729 23	9,729 23	6,858	17,431 40	12,639 00	34.00
36	Kettle River Valley	2,355	29,198	839	.....	1,519 18	1,549 18	839	1,631 63	2,745 07	20.00
37	Kingston and Pembroke	99,482	4,984,048	96,042	1,505	108,082 48	126,856 99	145,856	179,350 14	150,146 21	109.80
38	Klondike Mines	6,093	82,764	9,920	.....	30,926 69	30,926 69	9,920	44,428 19	49,339 83	31.81
39	Liverpool and Milton	44,371	154,855	5,100	.....	11,414 31	11,414 31	5,100	11,858 81	8,080 55	5.75
40	London and Port Stanley	463,206	7,693,852	11,797	44,537	62,905 71	69,411 31	125,615	110,628 77	137,519 29	23.66
41	Lotbinière and Megantic	52,056	777,535	18,900	.....	24,064 97	24,064 97	19,980	33,442 62	29,707 72	30.00
42	Manitoulin and North Shore	224,990	1,819,412	6,225	6,983	38,720 28	39,687 09	13,653	41,239 24	33,637 06	15.85
43	Maritime Coal, Ry. & Power Co.	129,432	995,572	18,474	6,503	36,711 00	36,711 00	24,977	43,887 08	32,646 39	15.00
44	Massawippi Valley	404,970	11,018,189	4,420	78,380	107,065 28	108,333 92	162,162	178,729 05	149,267 73	35.46
45	Midland Ry. Co. of Manitoba.	95,202	5,395,832	32,400	4,342	54,867 08	54,875 08	36,974	64,749 85	79,520 94	91.77
46	Moncton and Buctouche	28,540	554,038	22,208	.....	17,444 37	17,444 37	22,208	27,439 44	22,344 35	32.00
47	Montreal and Atlantic	999,834	53,613,488	161,390	254,666	620,838 55	626,154 91	552,908	845,097 08	752,267 17	163.40
48	Montreal and Province Line	63,908	1,703,431	16,198	24,958	37,367 51	37,373 51	94,209	90,610 03	64,291 14	58.60
49	Montreal and Vermont Jct.	1,008,715	23,664,541	.....	31,188	78,477 77	78,687 50	95,726	134,097 43	65,117 54	23.60
50	Morrissey, Fernie and Michel, B.C.	392,890	2,396,690	25,977	.....	63,519 62	69,330 57	25,977	77,282 82	77,286 77	10.85
51	Napierville Junction Ry.	162,882	4,283,681	16,956	3,240	40,284 80	40,498 80	20,658	43,822 16	30,422 43	27.06
52	Nelson and Fort Sheppard	41,712	1,398,508	18,273	.....	42,013 79	42,098 79	55,293	73,068 46	110,091 52	55.42
53	New Brunswick Coal and Ry. Co.	65,888	2,580,177	63,911	.....	38,101 60	38,101 60	63,914	69,372 14	75,974 48	58.00
54	New Brunswick and P.E. Island	34,813	483,588	25,080	18,760	21,607 45	21,607 45	48,240	32,110 73	26,785 67	36.00
55	New Brunswick Southern	12,130	694,326	52,324	24,770	21,623 26	21,623 26	77,094	41,101 84	69,286 76	82.35
56	New Westminster Southern	85,862	1,356,905	5,232	11,494	40,882 19	41,260 57	57,711	92,652 99	72,281 61	24.10
57	North Shore	6,797	54,376	4,800	4,800	2,718 79	2,718 79	14,400	3,080 17	2,892 51	8 63
58	Nosbonsing and Nipissing	16,310	89,705	8,155	.....	23,299 60	23,299 60	8,155	23,299 60	23,299 60	5.50
59	Nova Scotia Steel and Coal Co.	6,953	79,958	15,650	.....	3,527 77	3,527 77	15,650	5,776 50	11,268 53	12.50
60	Orford Mountain	35,993	683,867	28,240	805	22,869 77	22,960 77	52,971	30,250 10	37,996 82	55.10
61	Ottawa and New York	125,600	4,079,198	.....	39,018	69,152 35	69,260 52	115,827	139,410 80	190,930 98	56.90
62	Père Marquette in Canada	2,418,971	421,734,447	8,159	1,011,570	2,189,286 86	2,210,490 29	1,291,853	2,372,155 44	1,376,282 07	198.81

	Philipsburg Ry. and Quarry Co.	25,742	154,452	3,144	.....	4,351 63	4,351 63	3,144	4,351 63	247 00	6.00
	Princeton Branch of Washington Co. Ry.	150,545	767,779	6,335	76	17,193 94	17,193 94	10,183	24,914 76	9,826 07	5.10
65	Quebec Central	594,627	46,796,780	229,208	77,546	658,010 67	658,010 67	620,246	1,020,482 34	724,918 25	222.00
66	Quebec and Lake St. John	320,469	22,102,833	43,534	167,787	359,753 52	362,977 81	433,429	631,389 06	553,210 15	286.50
67	Quebec Ry. Lt. and Power Co.	107,150	1,824,313	277	19,300	40,646 52	40,833 52	26,919	57,193 07	41,950 97	27.00
68	Quebec Montreal and Southern	235,746	10,651,287	144.550	6,508	122,914 62	124,290 55	210,130	234,933 25	229,310 42	191.91
69	Red Mountain	82,942	739,550	6,570	8,296	17,243 14	17,834 14	15,004	22,162 27	69,347 29	9.59
70	Rutland and Noyan	139,398	472,559	.....	2,175	3,520 56	3,520 56	6,863	12,403 72	9,520 66	3.39
71	Salisbury and Harvey	43,661	441,329	37,116	.....	18,768 43	18,768 43	37,206	30,836 81	37,465 95	50.00
72	Schomberg and Aurora	.....	.....	.....	.....	.....	.....	.....	.....	.....	14.40
73	Stanstead, Shefford & Chambly	1,082,479	2,945,031	16,816	21,244	38,001 43	38,098 37	83,726	73,350 55	69,831 29	43.00
74	St. Clair Tunnel	.....	.....	.....	.....	277,052 00	277,052 00	.....	277,093 00	106,690 84	2.25
75	St. Lawrence and Adirondack	580,589	20,972,392	.....	101,340	247,500 13	247,674 03	255,750	422,232 51	273,490 68	46.12
76	Sydney and Louisburg, Dom. Coal Co	3,456,463	52,625,111	.....	176,987	324,817 15	327,143 35	210,699	349,287 80	332,716 66	62.99
77	Spokane and Brit. Columbia Ry	4,274	15,814	407	.....	594 20	760 70	414	819 68	1,719 58	3.70
78	Temiscouata	136,375	6,639,697	70,134	16,209	142,965 58	143,143 58	160,551	230,148 19	167,852 41	113.00
79	Temiskaming and North'n Ont.	535,242	45,708,866	41,077	243,158	685,385 28	710,070 61	533,861	1,324,129 16	771,182 05	264.74
80	Thousand Islands	30,512	185,072	33,664	.....	19,957 08	19,957 08	33,664	32,971 33	25,270 79	6.33
81	Toronto, Hamilton and Buffalo	1,234,303	48,020,980	.....	167,632	504,711 7	534,543 11	429,837	796,443 15	522,056 73	83 67
82	Vancouver Victoria and Eastern	927,936	25,286,084	35,865	65,732	312,625 65	313,484 68	176,586	402,539 64	382,018 18	178.49
83	Victoria and Sydney, B.C.	30,003	124,231	15,211	152	22,521 14	22,533 79	22,409	42,927 30	30,327 40	16.26
84	Victoria Terminal and Ferry Co.	29,942	34,130	1,081	22	1,964 17	3,122 21	1,597	5,488 33	5,729 56	1.14
85	Wabash Ry. Co., in Canada	1,225,487	287,921,368	12,333	805,692	1,521,299 68	1,524,515 88	1,501,944	2,123,208 00	1,645,444 45	.....
86	Wellington Colliery Co.	328,921	3,535,900	31,200	.....	44,111 04	44,111 04	31,200	47,464 79	47,464 79	10.75
87	York and Carleton	8,921	93,670	8,490	.....	3,530 00	3,530 00	8,490	5,375 00	4,236 00	10.50
	Final Total	66,842,258	13,160,567,550	7,061,580	40,304,906	95,714,783 41	96,685,076 23	79,853,028	145,056,336 19	104,600,084 43	.....

TABLE 10.—SUMMARY of Train Mileage for the Year ending June 30, 1909.

No.	1 NAME OF RAILWAY.	2 Mileage of Revenue Passenger Trains.	5 Mileage of Revenue Mixed Trains.	6 Mileage of Revenue Freight Trains.	9 Special Train-Mileage.	10 Total Revenue Train Mileage.	11 Mileage of Non-Revenue Trains.
		Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1	Alberta Railway and Irrigation Co		68,921	18,271		87,192	3,731
2	Algoma Central and Hudson Bay	2,450	32,391	10,926		45,767	5,429
3	Atlantic and Lake Superior	9,500	54,540	31,600		95,640	
4	Atlantic, Quebec and Western		13,758		780	14,538	
5	Bay of Quinte		165,438			165,438	
6	Bedlington and Nelson		1,253	5		1,258	
7	Bessemer and Barry's Bay			4,080		4,080	
8	Brandon, Saskatchewan and Hudson Bay	43,904		24,485	210	68,599	
9	British Yukon	546	55,800	900		57,246	2,543
10	Brockville, Westport and Northwestern	28,800	27,700	360	290	57,150	1,810
11	Canada Southern	1,521,040	132,279	1,900,138	2,511	3,555,968	94,925
12	Canadian Government—Intercolonial	2,705,492	487,881	3,568,680		6,762,053	
13	" " P. E. Island		333,764			333,764	23,510
14	Canadian Northern	1,528,299	494,479	2,544,380	2,883	4,570,041	379,506
15	Canadian Northern Ontario	276,935	27,800	108,430		413,165	4,911
16	Canadian Northern Quebec	235,257	53,092	172,030	2,356	462,735	16,991
17	Canadian Pacific	13,995,096	1,775,683	18,381,652	45,749	34,198,180	1,831,105
18	Cape Breton		19,530			19,530	
19	Caraquet		140,649			140,649	
20	Carillon and Grenville		2,522			2,522	524
21	Central Ontario	276,772		623,469		900,241	
22	Crowsnest Southern	40,097		44,475	52	84,624	42,533
23	Cumberland Railway and Coal Co	61,405	614,615			676,020	
24	Dominion Atlantic	305,363	191,240	56,763	2,518	555,884	11,089
25	Elgin and Havelock		18,720			18,720	
26	Eastern British Columbia		2,952			2,952	
27	Grand Trunk	7,629,652	489,585	8,642,566	18,478	16,780,281	588,908
28	Grand Trunk (Canada Atlantic)	513,066	135,129	624,597	351	1,273,143	76,267
29	Halifax and South-western	59,207	223,111	24,454	3,220	309,992	13,088
30	Hampton and St. Martin's		6,500			6,500	
31	Hereford	33,611	21,062	20,041		74,714	1,155
32	Inverness Railway and Coal Co		42,156	55,249		97,405	3,482
33	Irondale, Bancroft and Ottawa		31,300			31,300	
34	Kaslo and Slocan		7,187			7,187	
35	Kent Northern		6,858			6,858	
36	Kettle River Valley		839			839	
37	Kingston and Pembroke	48,309	96,042	1,505		145,856	150
38	Klondike Mines		9,920			9,920	
39	Liverpool and Milton		5,100			5,100	

40	London and Port Stanley	69,221	11,797	44,537	60	125,615	337
41	Lotbinière and Megantic		18,900		1,080	19,980	
42	Manitoulin and North Shore	445	6,225	6,983		13,653	13
43	Maritime Coal, Railway and Power Co.		18,474	6,503		24,977	
44	Massawippi Valley	79,362	4,420	78,380		162,162	1,027
45	Midland Railway of Manitoba	232	32,400	4,342		36,974	343
46	Moncton and Buctouche		22,208			22,208	
47	Montreal and Atlantic	136,420	161,390	254,666	432	552,908	22,562
48	Montreal and Province Line	52,977	16,198	24,938	96	94,209	4,327
49	Montreal and Vermont Junction	64,538		31,188		95,726	784
50	Morrissey, Fernie and Michel		25,977			25,977	
51	Napierville Junction Railway	406	16,956	3,240	56	20,658	326
52	Nelson and Fort Sheppard	37,020	18,273			55,293	6,282
53	New Brunswick Coal and Railway Co		63,914			63,914	
54	New Brunswick and P. E. Island	4,370	25,080	18,760		48,210	
55	New Brunswick Southern		52,324	24,770		77,094	11,713
56	New Westminster Southern	40,785	5,232	11,494	200	57,711	690
57	North Shore	4,800	4,800	4,800		14,400	
58	Nosbonsing and Nipissing		8,155			8,155	
59	Nova Scotia Steel and Coal Co		15,650			15,650	
60	Orford Mountain	23,788	28,240	805	138	52,971	3,847
61	Ottawa and New York	76,809		39,018		115,827	
62	Père Marquette (in Canada)	271,781	8,159	1,011,570	343	1,291,853	9,802
63	Philipsburg Railway and Quarry Co		3,144			3,144	
64	Princeton Branch of Washington Co. Railway	3,762	6,335	76	10	10,183	169
65	Quebec Central	214,607	229,208	77,546	98,885	620,246	157,270
66	Quebec and Lake St. John	221,768	43,534	167,787	340	433,429	
67	Quebec Railway, Light and Power Co	7,342	277	19,300		26,919	2,017
68	Quebec, Montreal and Southern	59,072	144,550	6,508		210,130	41,274
69	Red Mountain	138	6,570	8,296		15,004	427
70	Rutland and Noyan	4,688		2,175		6,863	9
71	Salisbury and Harvey		37,116		90	37,206	
72	Schomberg and Aurora						
73	Stanstead, Shefford and Chambly	45,579	16,816	21,244	87	83,726	3,683
74	St. Clair Tunnel						
75	St. Lawrence and Adirondack	154,359		101,340	51	255,750	3,672
76	Sydney and Louisburg (Dominion Coal Co.)	33,712		176,987		210,699	
77	Spokane and British Columbia Railway Co		407		7	414	
78	Temiscouata	74,208	70,134	16,209		160,551	10,422
79	Temiskaming and Northern Ontario	276,353	11,077	243,158	3,273	533,861	10,425
80	Thousand Islands		33,664			33,664	
81	Toronto, Hamilton and Buffalo	256,932		167,632	5,273	429,837	9,117
82	Vancouver, Victoria and Eastern	74,781	35,865	65,732	208	176,586	99,681
83	Victoria and Sidney, B.C.	7,046	15,211	152		22,409	
84	Victoria Terminal and Ferry Co	494	1,081	22		1,597	
85	Wabash Railway Co. (in Canada)	683,134	12,333	805,692	785	1,501,944	21,018
86	Wellington Colliery Co		31,200			31,200	
87	York and Carleton		8,490			8,490	
	Total	32,295,730	7,061,580	40,304,906	190,812	79,853,028	3,521,894

TABLE 11.—SUMMARY of Freight Traffic

Number.	1	2	3	4	5	6	7
	NAME OF RAILWAY.	PRODUCTS OF					
		GRAIN.			FLOUR.		
		Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
1	Alberta Railway and Irrigation Co	27,564	54	27,618	468		468
2	Algoma Central and Hudson Bay	911	113	1,024	155	39	194
3	Atlantic and Lake Superior	211	322	533	19	2,204	2,223
4	Atlantic, Quebec and Western	6	199	205	153	628	781
5	Bay of Quinte	1,336	295	1,631	227	2,523	2,750
6	Bedlington and Nelson						
7	Bessemer and Barry's Bay						
8	Brandon, Saskatchewan and Hudson Bay	54,787	22	54,809	211		211
9	British Yukon		1,890	1,890		518	518
10	Brockville, Westport and Southwestern	120	2,710	2,830	720	640	1,360
11	Canada Southern	40,336	649,904	690,240	21,102	153,416	174,518
12	Canadian Government—Intercolonial	20,184	85,935	106,119	24,186	122,083	146,269
13	Canadian Government—P. E. Island	14,219	306	14,525	3,185	1,044	4,229
14	Canadian Northern	780,592	8,576	789,168	52,970	1,946	54,916
15	Canadian Northern, Ontario	6,617	611	7,228	1,195	690	1,885
16	Canadian Northern, Quebec	676	13,572	14,248	227	15,253	15,480
17	Canadian Pacific	2,186,893	93,733	2,280,626	499,053	73,165	572,218
18	Cape Breton				8	315	323
19	Caraquet	72	90	162	32	1,06	1,092
20	Carillon and Grenville						
21	Central Ontario	4,021	3,905	7,926	313	2,175	2,488
22	Crowsnest Southern	180	297	477		83	83
23	Cumberland Railway and Coal Co		774	774		9,177	9,177
24	Dominion Atlantic	2,180	1,421	3,601			
25	Elgin and Havelock	63	103	166	59	726	785
26	Eastern British Columbia	33		33			
27	Grand Trunk	432,328	1,026,820	1,459,148	212,111	141,198	353,309
28	Grand Trunk—Canada Atlantic	5,144	388,071	393,215	9,152	67,625	76,777
29	Halifax and Southwestern	497	920	1,417	3,629	3,534	7,163
30	Hampton and St. Martins		100	100		200	200
31	Hereford	140	3,558	3,698	43	872	915
32	Inverness Railway and Coal Co	44	124	168	167	2,012	2,179
33	Irondale, Bancroft and Ottawa		80	80		302	302
34	Kaslo and Slocan		15	15			
35	Kent Northern					851	851
36	Kettle River Valley,	4		4			
37	Kingston and Pembroke	6,673	5,128	11,801	2,267	2,280	4,547
38	Klondike Mines						
39	Liverpool and Milton						
40	London and Port Stanley	13,763	14,909	28,672	2,919	3,427	6,346
41	Lotbinière and Megantic	143	169	312	184	606	790
42	Manitoulin and North Shore	30		30	21		21
43	Maritime Coal, Railway and Power Co	131	97	228	47	135	182
44	Massawippi Valley	441	27,975	28,416	182	1,699	1,881
45	Midland Railway of Manitoba	29,045	10,254	39,299	219	76	295
46	Moncton and Buctouche						
47	Montreal and Atlantic	514	68,558	69,072	928	124,579	125,507
48	Montreal and Province Line	180	946	1,126	42	1,420	1,462
49	Montreal and Vermont Junction	46	235,821	235,867	128	33,816	33,944
50	Morrissey, Fernie and Michel						
51	Napierville Junction Railway	43	58	101		392	392
52	Nelson and Fort Sheppard		218	218	76	327	403

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Movement for the Year ending June 30, 1909.

8	9	10	11	12	13	14	15	16	
AGRICULTURE.									
Other Mill Products.			Hay.			Tobacco.			
Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Number.
5,056	15	5,071	578	1	579	5	1	6	1
117	.....	117	807	551	1,358	.....	.....	.....	2
.....	.....	.....	.....	.....	.....	.....	.....	.....	3
.....	8	8	40	272	312	1	19	20	4
12	62	74	304	15	319	.....	.....	.....	5
.....	.....	.....	.....	9	9	.....	.....	.....	6
.....	.....	.....	.....	.....	.....	.....	.....	.....	7
138	15	153	22	.....	22	.....	.....	.....	8
.....	223	223	.....	2,058	2,058	.....	.....	.....	9
510	780	1,290	90	830	920	5	10	15	10
11,046	173,971	185,017	8,930	59,953	68,883	437	5,739	6,176	11
11,036	19,993	31,029	37,788	656	30,444	.....	.....	.....	12
881	121	1,002	1,991	2	1,993	143	32	175	13
11,895	2,198	14,093	25,191	2,032	27,223	.....	.....	.....	14
769	645	1,414	1,742	254	1,996	.....	.....	.....	15
.....	.....	.....	1,928	13,506	15,434	101	1,199	1,300	16
266,413	34,391	300,804	208,273	22,295	230,568	6,619	2,246	8,865	17
.....	.....	.....	1	27	28	.....	.....	.....	18
20	60	80	210	600	810	.....	22	22	19
.....	.....	.....	.....	.....	.....	.....	.....	.....	20
269	1,031	1,300	95	1,502	1,597	.....	.....	.....	21
87	158	245	110	435	545	.....	.....	.....	22
.....	486	486	.....	325	325	.....	.....	.....	23
7,975	17,153	25,128	4,109	119	4,228	62	27	89	24
.....	365	365	21	10	31	.....	.....	.....	25
.....	.....	.....	36	.....	36	.....	.....	.....	26
66,969	89,539	156,508	61,569	82,278	143,847	822	4,830	5,652	27
5,952	100,620	106,572	10,155	40,760	50,915	2	326	328	28
1,968	2,161	4,129	1,621	1,395	3,016	.....	.....	.....	29
.....	.....	.....	.....	60	60	.....	.....	.....	30
54	148	202	401	59	460	4	9	13	31
56	10	66	42	519	561	.....	1	1	32
.....	431	431	.....	120	120	.....	.....	.....	33
.....	.....	.....	.....	45	45	.....	.....	.....	34
.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	1	.....	1	.....	.....	.....	36
1,269	727	1,996	617	240	857	64	5	69	37
.....	.....	.....	.....	.....	.....	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	39
2,205	4,095	6,300	7,782	3,335	11,117	.....	232	232	40
.....	12	12	100	60	160	5	.....	5	41
19	.....	19	124	.....	124	.....	.....	.....	42
116	65	181	710	580	1,290	.....	4	4	43
505	2,488	2,993	67	1,123	1,190	1	8	9	44
516	151	667	22	22	44	.....	.....	.....	45
.....	.....	.....	.....	.....	.....	.....	.....	.....	46
363	55,329	55,692	18,288	1,610	19,898	16	758	774	47
112	372	484	3,642	1,187	4,829	.....	.....	.....	48
20	88,900	88,920	1,995	44,100	46,095	.....	.....	.....	49
.....	.....	.....	.....	.....	.....	.....	.....	.....	50
70	.....	70	1,270	91	1,361	.....	.....	.....	51
7	97	104	39	1,157	1,196	.....	.....	.....	52

TABLE 11.—SUMMARY of Freight Traffic Movement

Number.	1 NAME OF RAILWAY.	2	3	4	5	6	7
		PRODUCTS OF					
		GRAIN.			FLOUR.		
		Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
53	New Brunswick Coal and Railway Co.	.....	766	766	.....	433	433
54	New Brunswick and P.E. Island	.....	605	605	.....	991	991
55	New Brunswick Southern	390	74	464	262	31	293
56	New Westminster Southern	80	2,206	2,286	.....	710	710
57	North Shore	.....	.....	.....	.....	.....	.....
58	Nosbonsing and Nipissing	.....	.....	.....	.....	.....	.....
59	Nova Scotia Steel and Coal Co	.....	202	202	.....	103	103
60	Orford Mountain	17	891	908	28	702	730
61	Ottawa and New York	639	654	1,293	173	1,116	1,289
62	Père Marquette, in Canada	71,872	77,862	149,734	15,244	17,896	33,140
63	Philipsburg Railway and Quarry Co	.....	.....	.....	.....	.....	.....
64	Princeton Branch of Washington Co. Ry.	.....	774	774	.....	129	129
65	Quebec Central	.....	7,220	7,220	.....	25,459	25,459
66	Quebec and Lake St. John	2,540	4,565	7,105	1,027	5,326	6,353
67	Quebec Railway, Light and Power Co.	4,415	305	4,720	1,168	20	1,188
68	Quebec, Montreal and Southern	480	2,178	2,658	10	4,158	4,168
69	Red Mountain	.....	16	16	.....	83	83
70	Rutland and Noyan	.....	650	650	.....	20	20
71	Salisbury and Harvey	76	400	476	27	500	527
72	Schomberg and Aurora	.....	.....	.....	.....	.....	.....
73	Stanstead, Shefford and Chambly	194	237,212	237,406	1,060	35,087	36,147
74	St. Clair Tunnel	.....	.....	.....	.....	.....	.....
75	St. Lawrence and Adirondack	267	885	1,152	791	633	1,424
76	Sydney and Louisburg (Dom. Coal Co.)	96	920	1,016	.....	1,000	1,000
77	Spokane and British Columbia Railway	7	.....	7	.....	75	75
78	Temiscouata	264	867	1,131	448	1,084	1,532
79	Temiskaming and Northern Ontario	5,024	1,961	6,985	3,561	1,522	5,083
80	Thousand Islands	.....	121	121	.....	886	886
81	Toronto, Hamilton and Buffalo	2,378	6,546	8,924	464	1,190	1,654
82	Vancouver, Victoria and Eastern	2,090	3,407	5,497	25	1,396	1,421
83	Victoria and Sydney, B.C.	78	72	150	126	90	216
84	Victoria Terminal and Ferry Co	73	77	150	70	146	216
85	Wabash Railway Co., in Canada	116,007	.....	116,007	23,850	.....	23,850
86	Wellington Colliery Co.	.....	263	263	.....	340	340
87	York and Carleton	.....	.....	.....	.....	.....	.....
	Final total	3,837,154	3,000,352	6,837,506	884,732	874,162	1,758,894

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for the Year ending June 30, 1909—*Continued.*

8	9	10	11	12	13	14	15	16	

AGRICULTURE—*Continued.*

Other Mill Products.			Hay.			Tobacco.			
Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Number.
				240	240				53
	402	402	4,110		4,110				54
470		470	171	42	213	6	1	7	55
	789	789	78	4,743	4,821		90	90	56
				30	30				57
									58
	122	122	10	14	24		1	1	59
	1,257	1,257	30	561	591		5	5	60
225	1,353	1,578	572	68	640	1	4	5	61
11,514	21,384	32,898	40,639	17,416	58,055	48	1,162	1,210	62
									63
	19	19		110	110				64
									65
			895	4,902	5,797				66
391	106	497	438	105	543	19	2	21	67
	144	144	14,546	209	14,755				68
	172	172		512	512				69
			13	856	869				70
			257		257				71
									72
39	89,100	89,139	1,278	44,826	46,104				73
									74
1,046	1,508	2,554	676	1,149	1,825		264	264	75
	42	42		2,400	2,400		1	1	76
			51		51				77
47	156	203	1,540	64	1,604	8	62	70	78
264	128	392	3,829	6,948	10,777				79
	112	112		55	55				80
298	2,208	2,506	186	255	441	70	420	490	81
269	1,035	1,304	6,008	1,124	7,132		104	104	82
									83
									84
28,106		28,106	12,840		12,840	439		439	85
	120	120		800	800				86
			160	605	765				87
439,094	716,977	1,156,071	489,038	372,227	861,265	8,878	17,584	26,462	

TABLE 11.—SUMMARY of Freight Traffic

Number.	NAME OF RAILWAY.	17	18	19	20	21	22	23
			PRODUCTS OF					
			COTTON.			FRUITS AND VEGETABLES.		
			Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
1	Alberta Railway and Irrigation Co.			6	6	6,381	801	7,182
2	Algoma Central and Hudson Bay					191	20	211
3	Atlantic and Lake Superior							
4	Atlantic, Quebec and Western			5	5	350	65	415
5	Bay of Quinté					1,835		1,835
6	Bedlington and Nelson							
7	Bessemer and Barry's Bay							
8	Brandon, Saskatchewan and Hudson Bay						1,309	1,309
9	British Yukon						1,471	1,471
10	Brockville, Westport and Northwestern					50	129	179
11	Canada Southern			45,899	45,899	9,123	96,635	105,758
12	Canadian Government—Intercolonial		2,587	1,492	4,079	46,377	6,890	53,267
13	Canadian Government—P. E. Island		11	38	49	8,968	157	9,125
14	Canadian Northern					11,653	13,363	25,016
15	Canadian Northern, Ontario					1,039	48	1,087
16	Canadian Northern, Quebec					254	2 653	2,907
17	Canadian Pacific		61	16,607	16,668	148,385	50,710	199,095
18	Cape Breton					1	1	2
19	Caraquet					25		25
20	Carillon and Grenville							
21	Central Ontario					7,377	356	7,733
22	Crowsnest Southern					56	300	356
23	Cumberland Railway and Coal Co							
24	Dominion Atlantic		1,188	1,131	2,319	76,046	1,009	77,055
25	Elgin and Havelock					450		450
26	Eastern British Columbia							
27	Grand Trunk		1,621	10,416	12,037	80,708	86,449	167,157
28	Grand Trunk—Canada Atlantic		8,666	9,359	18,025	1,342	22,705	24,047
29	Halifax and Southwestern					3,664	386	4,050
30	Hampton and St. Martins							
31	Hereford					320	28	348
32	Inverness Railway and Coal Co					31	112	143
33	Irondale, Bancroft and Ottawa						45	45
34	Kaslo and Slocan							
35	Kent Northern							
36	Kettle River Valley							
37	Kingston and Pembroke		236	646	882	163	289	452
38	Klondike Mines							
39	Liverpool and Milton							
40	London and Port Stanley			463	463	7,954	6,776	14,730
41	Lotbinière and Mégantic					118	28	146
42	Manitoulin and North Shore					34		34
43	Maritime Coal Railway and Power Co					13	133	146
44	Massawippi Valley					253	265	518
45	Midland Railway of Manitoba					28	265	293
46	Moncton and Buctouche							
47	Montreal and Atlantic			8,572	8,572	584	8,626	9,210
48	Montreal and Province Line							
49	Montreal and Vermont Junction					107	2,996	3,103
50	Morissey, Fernie and Michel							
51	Napierville Jct. Ry						262	262
52	Nelson and Port Sheppard					27	418	445

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Movement for the Year ending June 30, 1909—*Continued.*

24	25	26	27	28	29	30	31	32	
AGRICULTURE—*Continued.*			PRODUCTS OF ANIMALS.						
OTHER PRODUCTS OF AGRICULTURE.			LIVE STOCK.			DRESSED MEATS.			
Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Number.
	24	24	6,749	639	7,388	126	30	157	1
			679		679	227		227	2
			22	65	87				3
			204	167	371	2	62	64	4
2,559	34	2,593	173		173	87		87	5
									6
									7
			418	137	555				8
			6	3,130	3,136		56	56	9
			1,411	52	1,463				10
15,076	82,696	97,772	24,422	204,559	228,981	878	159,489	160,367	11
			15,912	4,228	20,140	3,995	14,014	18,009	12
			3,248	17	3,265	2,219	4	2,223	13
			28,675	2,553	31,228	2,801	885	3,686	14
			4,890	167	5,057	95		95	15
			1,322	391	1,713				16
			317,470	37,167	354,637	22,157	112,684	134,841	17
				4	4	1		1	18
200		200	30		30	15		15	19
			5	15	20				20
10,657	139	10,796	5,096	98	5,194	71	10	81	21
25		25	148	22	170		127	127	22
				12	12				23
			2,162	152	2,314	1,186	2	1,188	24
			64		64	64	37	101	25
			11		11				26
25,442	19,483	44,925	277,341	104,374	381,715	24,500	16,443	40,943	27
	6,688	6,688	9,764	11,755	21,519	404	45,588	45,992	28
			311	58	369				29
									30
68	1	69	327	17	344	7	31	38	31
			223	16	239	9	10	19	32
			191		191		36	36	33
									34
									35
									36
			1,603	167	1,770	74	40	114	37
									38
									39
9,625	1,862	11,487	3,307	538	3,845	1,574	3,197	4,771	40
2		2		8	8	16		16	41
			2		2	1		1	42
				12	12		37	37	43
			706	1,026	1,732	206	5	211	44
			8	51	59				45
2,935		2,935							46
			3,643	9,646	13,289	16	83,898	83,914	47
			847	96	943				48
	43,795	43,795	153	13,109	13,262				49
									50
			429	40	469				51
	47	47	33	73	106		70	70	52

TABLE 11.—SUMMARY of Freight Traffic

Number.	NAME OF RAILWAY.	17	18	19	20	21	22	23
		PRODUCTS OF						
			COTTON.			FRUIT AND VEGETABLES.		
			Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
53	New Brunswick Coal and Railway Co.							
54	New Brunswick and P. E. Island							
55	New Brunswick Southern		2		2	210	3	213
56	New Westminster Southern					22	1,528	1,550
57	North Shore							
58	Nosbonsing and Nipissing							
59	Nova Scotia Steel and Coal Co.						6	6
60	Orford Mountain					15	42	57
61	Ottawa and New York		276	2,509	2,785	141	635	776
62	Père Marquette in Canada		72	2,347	2,419	35,384	41,539	76,923
63	Philipsburg Railway and Quarry Co.							
64	Princeton Branch of Washington Co. Ry.						812	812
65	Quebec Central							
66	Quebec and Lake St. John					2,373		2,373
67	Quebec Railway Light and Power Co.			3,369	3,369	260	6	266
68	Quebec, Montreal and Southern					339	1,096	1,435
69	Red Mountain						190	190
70	Rutland and Noyan			14	14		28	28
71	Salisbury and Harvey							
72	Schomberg and Aurora							
73	Stanstead, Shefford and Chambly					133	5,772	5,905
74	St. Clair Tunnel							
75	St. Lawrence and Adirondack		16	1,227	1,243	122	2,969	3,091
76	Sydney and Louisburg (Dom. Coal Co)						210	210
77	Spokane and British Columbia Ry							
78	Temiscouata		1	18	19			
79	Temiskaming and Northern Ontario						868	868
80	Thousand Islands					80	129	209
81	Toronto, Hamilton and Buffalo			489	489	1,918	4,203	6,121
82	Vancouver, Victoria and Eastern			12	12	986	1,112	2,098
83	Victoria and Sydney, B.C							
84	Victoria Terminal and Ferry Co.							
85	Wabash Railway Co. in Canada		2,944		2,944	23,036		23,036
86	Wellington Colliery Co.						156	156
87	York and Carleton							
	Final total		17,681	104,619	122,300	478,926	367,004	845,930

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Movement for the Year ending June 30, 1909—*Continued.*

24	25	26	27	28	29	30	31	32	
AGRICULTURE—*Continued.*			PRODUCTS OF ANIMALS—*Continued.*						
OTHER PRODUCTS OF AGRICULTURE.			LIVE STOCK.			DRESSED MEATS.			
Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Number.
.....	.....	.....	.....	.....	.....	.....	.....	.....	53
.....	.....	.....	170	.....	170	.....	.....	.....	54
.....	.....	.....	122	.....	122	67	.....	67	55
.....	45	45	134	452	586	.....	66	66	56
.....	.....	.....	.....	.....	.....	.....	.....	.....	57
.....	.....	.....	.....	.....	.....	.....	.....	.....	58
.....	3	3	1	.....	1	1	6	7	59
775	.....	775	346	1	347	2	16	18	60
65	51	116	1,479	77	1,556	32	8	40	61
50,262	9,729	59,991	17,266	2,811	20,077	8,222	16,693	24,915	62
.....	.....	.....	.....	.....	.....	.....	.....	.....	63
.....	.....	.....	.....	.....	.....	.....	.....	.....	64
5,199	1,185	6,384	4,456	.....	4,456	.....	.....	.....	65
.....	.....	.....	2,029	726	2,755	.....	518	518	66
118	3	121	390	49	439	85	.....	85	67
.....	.....	.....	1,443	245	1,688	15	.....	15	68
.....	20	20	23	78	101	.....	.....	.....	69
.....	.....	.....	23	5	28	.....	.....	.....	70
.....	.....	.....	126	.....	126	.....	.....	.....	71
.....	.....	.....	.....	.....	.....	.....	.....	.....	72
.....	43,795	43,795	1,093	13,162	14,255	.....	.....	.....	73
.....	.....	.....	.....	.....	.....	.....	.....	.....	74
.....	634	634	494	215	709	10	.....	10	75
28	.....	28	72	202	274	40	4,060	4,100	76
.....	.....	.....	.....	.....	.....	.....	.....	.....	77
5,349	114	5,463	137	537	674	88	97	185	78
563	3,550	4,113	.....	5,957	5,957	.....	3,357	3,357	79
.....	.....	.....	769	.....	769	.....	.....	.....	80
508	4,505	5,013	1,584	4,841	6,425	.....	13	13	81
446	604	1,050	313	2,347	2,660	11	56	67	81
.....	.....	.....	130	94	224	.....	.....	.....	83
.....	.....	.....	29	195	224	.....	.....	.....	84
5,795	.....	5,795	34,960	.....	34,960	24,035	.....	24,035	85
.....	131	131	.....	72	72	.....	.....	.....	86
.....	.....	.....	.....	.....	.....	.....	.....	.....	87
135,697	219,138	354,835	779,594	426,627	1,206,221	93,339	461,645	554,984	

TABLE 11.—SUMMARY of Freight Traffic

Number.	NAME OF RAILWAY.	33	34	35	36	37	38	39
			PRODUCTS OF					
			OTHER PACKING-HOUSE PRODUCTS.			POULTRY, GAME AND FISH.		
			Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.
1	Alberta Railway and Irrigation Co.		10	230	240	11		11
2	Algoma Central and Hudson Bay							
3	Atlantic and Lake Superior							
4	Atlantic, Quebec and Western			1	1	1,477		1,477
5	Bay of Quinte							
6	Bedlington and Nelson							
7	Bessemer and Barry's Bay							
8	Brandon, Saskatchewan and Hudson Bay							
9	British Yukon			477	477		33	33
10	Brockville, Westport and Northwestern					84	10	94
11	Canada Southern		9,982	61,120	71,102	1,275	15,454	16,729
	Canadian Government Railways—							
12	Intercolonial					27,487	266	27,753
13	P. E. Island		2,229	25	2,254	3,217	159	3,376
14	Canadian Northern		4,025	1,251	5,276	4,370	138	4,508
15	Canadian Northern, Ontario		710	119	829	22	1	23
16	Canadian Northern, Quebec			1,471	1,471			
17	Canadian Pacific		21,663	67,275	88,938	24,292	10,729	35,021
18	Cape Breton					126		126
19	Caraquet			40	40	2,420		2,420
20	Carillon and Grenville							
21	Central Ontario		21		21	75	1	76
22	Crowsnest Southern							
23	Cumberland Railway and Coal Co							
24	Dominion Atlantic		433	32	465	1,205	811	2,016
25	Elgin and Havelock		86		86	99	45	144
26	Eastern British Columbia							
27	Grand Trunk		26,369	35,854	62,223	8,702	10,635	19,337
28	Grand Trunk (Canada Atlantic)		122	5,656	5,778	55	4,624	4,679
29	Halifax and Southwestern		79	27	106	3,158	101	3,259
30	Hampton and St. Martin's							
31	Hereford		32	49	81		4	4
32	Inverness Railway and Coal Co		42	5	47	483	177	660
33	Irondale, Bancroft and Ottawa			10	10	7		7
34	Kaslo and Slocan							
35	Kent Northern							
36	Kettle River Valley							
37	Kingston and Pembroke		27	13	40	6	64	70
38	Klondike Mines							
39	Liverpool and Milton							
40	London and Port Stanley		2,464	1,936	4,400	72	160	232
41	Lotbinière and Megantic					8		8
42	Manitoulin and North Shore							
43	Maritime Coal and Railway Co			43	43		16	16
44	Massawippi Valley		276	76	352		2	2
45	Midland Railway of Manitoba							
46	Moncton and Buctouche							
47	Montreal and Atlantic		139	37,328	37,467	22	7,644	7,666
48	Montreal and Province Line							
49	Montreal and Vermont Junction			49,641	49,641		17,543	17,543
50	Morrissey, Fernie and Michel							
51	Napierville Junction Railway					18		18
52	Nelson and Fort Sheppard							

Movement for the Year ending June 30, 1909—*Continued.*

40	41	42	43	44	45	46	47	48	
ANIMALS—*Continued.*									
Wool.			Hides and Leather.			Other Products of Animals.			
Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Number.
117		117	78	5	83	49	2	51	1
									2
									3
	1	1	9	4	13				4
1		1	16		16				5
									6
									7
						52		52	8
							755	755	9
4		4	250	54	304				10
95	13,386	13,481	1,401	19,650	21,051	6,521	49,841	56,362	11
1,120	178	1,298	5,139	1,104	6,243				12
52		52	464	11	475				13
			3,205	75	3,280				14
			258	2	260				15
			117	391	508	1,234	2,638	3,872	16
2,029	3,133	5,162	20,952	21,395	42,347				17
3		3	153		153				18
1		1	55		55				19
									20
3		3	1,072	25	1,097	325		325	21
							55	55	22
									23
			249	47	296				24
20		20	46	10	56				25
									26
1,501	2,883	4,384	22,332	13,787	36,119	42,462	14,625	57,087	27
	2,561	2,561	1,037	15,307	16,344	4,305	19,838	24,143	28
			81		81				32
									33
			13	5	18	191	2	193	31
13	2	15	85		85				32
1		1	7		7	38		38	33
									34
									35
									36
6	8	14	287	432	719				37
									38
									39
79	60	139	257	1,457	1,714	993	489	1,482	40
			38		38	188		188	41
									42
1		1	2		2				43
11	32	43	179	207	386				44
									45
									46
16	2,481	2,497	1,617	12,506	14,123				47
22		22	112	590	702				48
	2,491	2,491	38	16,961	16,999		14,138	14,138	49
									50
				47	47				51
							158	158	52

TABLE 11.—SUMMARY of Freight Traffic

Number.	33	34	35	36	37	38	39
	NAME OF RAILWAY.	PRODUCTS OF					
		OTHER PACKING-HOUSE PRODUCTS.			POULTRY, GAME AND FISH.		
		Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.
53	New Brunswick Coal and Railway Co.						
54	New Brunswick and P. E. Island	366		366			
55	New Brunswick Southern	19		19	209		209
56	New Westminster Southern		142	142	1,048	224	1,272
57	North Shore						
58	Nosbonsing and Nipissing						
59	Nova Scotia Steel and Coal Co					5	5
60	Orford Mountain	1	12	13		15	15
61	Ottawa and New York	27	62	89	48	7	55
62	Père Marquette (in Canada)	12,869	10,111	22,980	375	835	1,210
63	Philipsburg Railway and Quarry Co						
64	Princeton Branch of Washington Co. Ry.						
65	Quebec Central						
66	Quebec and Lake St. John	637		637			
67	Quebec Railway, Light and Power Co.	95	28	123	26		26
68	Quebec, Montreal and Southern		17	17	68	14	82
69	Red Mountain						
70	Rutland and Noyan					8	8
71	Salisbury and Harvey						
72	Schomberg and Aurora						
73	Stanstead, Shefford and Chambly	134	49,641	49,775	260	17,542	17,802
74	St. Clair Tunnel						
75	St. Lawrence and Adirondack	11	17	28	27	3,697	3,724
76	Sydney and Louisburg (Dom. Coal Co.)		520	520	20	10	30
77	Spokane and British Columbia Railway						
78	Temiscouata	75	25	100	78	40	118
79	Temiskaming and Northern Ontario						
80	Thousand Islands						
81	Toronto, Hamilton and Buffalo	2,603	811	3,414		150	150
82	Vancouver, Victoria and Eastern	47	171	218	219	202	421
83	Victoria and Sydney, B.C.						
84	Victoria Terminal and Ferry Co						
85	Wabash Railway Co. (in Canada)	26,662		26,662	2,468		2,468
86	Wellington Colliery Co		38	38		5	5
87	York and Carleton				100	73	173
	Final total	112,255	324,274	436,529	83,637	91,444	175,081

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Movement for the Year ending June 30, 1909—*Continued.*

40	41	42	43	44	45	46	47	48	
ANIMALS.– *Concluded.*									
Wool.			Hides and Leather.			Other Products of Animals.			
Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Number.
									53
				122	122				54
3		3	11		11				55
	21	21					752	752	56
									57
									58
2		2	3		3				59
1		1	29		29				60
1	25	26	1,689	164	1,853	552		552	61
414	312	726	1,342	7,608	8,950	5,186	2,555	7,741	62
									63
									64
									65
			280		280	187	1,354	1,541	66
5		5	170	41	211	140		140	67
			53	479	532				68
									69
				159	159				70
									71
									72
	2,491	2,491	154	16,957	17,111		14,138	14,138	73
									74
10	72	82	83	2,505	2,588	258	570	828	75
			2	3	5				76
									77
2	2	4	26	46	72				78
									79
									80
2	59	61	38	191	229	445	1,911	2,356	81
128	53	181	10	6	16	32	1,089	1,121	82
									83
									84
1,302		1,302	7,165		7,165	6,400		6,400	85
	20	20		11	11				86
									87
6,965	30,271	37,236	70,604	132,364	202,968	69,558	124,910	194,468	

TABLE 11.—SUMMARY of Freight Traffic

Number.	NAME OF RAILWAY.	PRODUCTS					
		ANTHRACITE COAL.			BITUMINOUS COAL.		
		Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.
	49	50	51	52	53	54	55
1	Alberta Ry. and Irrigation Co	83		83	34,311	2,817	37,128
2	Algoma Central and Hudson Bay	95		95	7,558	212	7,770
3	Atlantic and Lake Superior						
4	Atlantic, Quebec and Western				9	1,751	1,760
5	Bay of Quinté		10,164	10,164		25,681	25,681
6	Bedlington and Nelson				43	80	123
7	Bessemer and Barry's Bay					1,474	1,474
8	Brandon, Saskatchewan and Hudson Bay	15	7,021	7,036		995	995
9	British Yukon					193	193
10	Brockville, Westport and North-Western		575	575		220	220
11	Canada Southern		1,043,805	1,043,805		370,315	370,315
	Canadian Government Railways—						
12	Intercolonial				1,010,781	8,739	1,019,520
13	Prince Edward Island	1,627		1,627	6,450	331	6,781
14	Canadian Northern		45,974	45,974	50,690	229,198	279,888
15	Canadian Northern, Ontario	138	5,541	5,679	1,646	11,906	13,552
16	Canadian Northern, Quebec		4,276	4,276		29,939	29,939
17	Canadian Pacific	111,467	603,207	714,674	746,984	654,415	1,401,399
18	Cape Breton				130	230	360
19	Caraquet		125	125		50	50
20	Carillon and Grenville						
21	Central Ontario	652	3,542	4,194	9,625	38,121	47,746
22	Crowsnest Southern					21,345	21,345
23	Cumberland Ry. and Coal Co.				339,574		339,574
24	Dominion Atlantic	2,510	28,398	30,908			
25	Elgin and Havelock					342	342
26	Eastern British Columbia				17,255		17,255
27	Grand Trunk	68,539	1,685,557	1,754,086	60,356	1,614,416	1,674,772
28	Grand Trunk (Canada Atlantic)	295	70,692	70,987	129	79,402	79,531
29	Halifax and South Western				1,158	4,501	5,659
30	Hampton and St. Martins					220	220
31	Hereford		104	104		2	2
32	Inverness Ry. and Coal Co		53	53	256,482	22	256,504
33	Irondale Bancroft and Ottawa		40	40		1,105	1,105
34	Kaslo and Slocan					117	117
35	Kent and Northern				339		339
36	Kettle River Valley						
37	Kingston and Pembroke	252	405	657	446	2	448
38	Klondike Mines						
39	Liverpool and Milton						
40	London and Port Stanley		20,474	20,474		113,951	113,951
41	Lotbinière and Megantic					624	624
42	Manitoulin and North Shore		38	38		1,169	1,169
43	Maritime Coal Ry. and Power Co.				121,783	7	121,790
44	Massawippi Valley		3,542	3,542		3,460	3,460
45	Midland Ry. of Manitoba		2,985	2,985	6	43,821	43,827
46	Moncton and Buctouche				3,533		3,533
47	Montreal and Atlantic	67	7,184	7,251	7	4,469	4,476
48	Montreal and Province Line (E)		670	670		13,180	13,180
49	Montreal and Vermont Junction		7,214	7,214		1,145	1,145

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Movement for the Year ending June 30, 1909—*Continued.*

56	57	58	59	60	61	62	63	64	

OF MINES.

Coke.			Ores.			Stone, Sand and Other Like Articles.			
Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Number.
1	31,498	31,499				174	762	936	1
			225,220		225,220	10,555		10,555	2
									3
							5	5	4
			1,024	501	1,525	3,068	706	3,774	5
									6
			18,750		18,750				7
	113	113					247	247	8
			983		983				9
						210		210	10
	150,956	150,956		28,781	28,781	189,693	126,857	316,550	11
			2,892	33	2,925	157,272	803	158,075	12
1		1				4,902	59	4,961	13
	729	729		47	47	87,325	5,211	92,536	14
			50,084		50,084	4,951	15	4,966	15
	641	641	278		278	1,657	10,615	12,272	16
165,133	71,791	236,924	1,312,214	96,982	1,409,196	785,520	149,537	935,057	17
									18
						1,025		1,025	19
									20
961	1,560	2,521	17,320	2,011	19,331	314	617	931	21
88,274	97,033	185,307				3,072		3,072	22
									23
			128	70	198	27,160	75	27,235	24
			40		40				25
									26
59,263	130,054	189,317	22,922	234,077	256,999	683,730	82,156	765,886	27
20	651	671	1,438	426	1,864	8,624	80,029	88,653	28
			45		45	2		2	29
						4,980		4,980	30
						120	70	190	31
						46		46	32
									33
			10,307		10,307				34
									35
			1,977		1,977				36
			24,659	23	24,682	67		67	38
									38
									39
	1,436	1,436		1,529	1,529	16,420	12,901	29,321	40
			19	37	56	13,536		13,536	41
			207,479		207,479	1,351		1,351	42
						1,263	259	1,522	43
			36,856	1,587	38,443	27,912	27,682	55,594	44
	60	60				30	16	46	45
						3,781		3,781	46
4	485	489	432	3,356	3,788	1,175	35,064	36,239	47
						2,640	519	3,159	48
				92	92	109	67,430	67,539	49

TABLE 11.—SUMMARY Freight Traffic

Number.	49	50	51	52	53	54	55
	NAME OF RAILWAY.	PRODUCTS					
		ANTHRACITE COAL.			BITUMINOUS COAL.		
		Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.
50	Morrissey, Fernie and Michel				377,788		377,788
51	Napierville Junction Ry		89,995	89,995		8,413	8,413
52	Nelson and Fort Sheppard				19	380	399
53	New Brunswick Coal and Ry. Co				32,619		32,619
54	New Brunswick and P.E. Island					2,815	2,815
55	New Brunswick Southern	158	32	190	2		2
56	New Westminster Southern					11,124	11,124
57	North Shore				6,557		6,557
58	Nosbonsing and Nipissing						
59	Nova Scotia Steel and Coal Co					406	406
60	Orford Mountain		20	20	5	15	20
61	Ottawa and New York		27,328	27,328		14,567	14,567
62	Père Marquette in Canada	21,383	85,535	106,918	77,359	517,708	595,067
63	Philipsburg Ry. and Quarry Co					2,739	2,739
64	Princeton Branch of Washington Co. Railway		4,939	4,939		29,484	29,484
65	Quebec Central		1,800	1,800		7,500	7,500
66	Quebec and Lake St. John		4,220	4,220		19,868	19,868
67	Quebec Ry. Light and Power Co	249	32	281	9,996		9,996
68	Quebec, Montreal and Southern		15,606	15,606		11,509	11,509
69	Red Mountain					2,949	2,949
70	Rutland and Noyan		130	130		111	111
71	Salisbury and Harvey					2,642	2,642
72	Schomberg and Aurora						
73	Stanstead, Shefford and Chambly		12,714	12,714		1,790	1,790
74	St. Clair Tunnel						
75	St. Lawrence and Adirondack		189,392	189,392		147,713	147,713
76	Sydney and Louisburg (Dom. Coal Co)				3,303,341		3,303,341
77	Spokane and Brit. Columbia Ry. Co.					23	23
78	Temiscouata	2	137	139	74	1,175	1,249
79	Temiskaming and Northern Ontario		10,049	10,049		89,278	89,278
80	Thousand Islands					423	423
81	Toronto, Hamilton and Buffalo		364,412	364,412		346,648	346,648
82	Vancouver, Victoria and Eastern				108	3,740	3,848
83	Victoria and Sydney, B.C					29	29
84	Victoria Terminal and Ferry Co				29		29
85	Wabash Ry. Co. in Canada	35,065		35,065	342,782		342,782
86	Wellington Colliery Co				324,738		324,738
87	York and Carleton						
	Final total	242,597	4,357,917	4,600,514	7,144,712	4,503,016	11,647,728

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Movement for the Year ending June 30, 1909—*Continued.*

56	57	58	59	60	61	62	63	64	

OF MINES—*Continued.*

Coke			Ore.			Stone, Sand, and Other Like Articles.			
Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Number.
									50
	401	401		111	111		1,260	1,260	51
	27	27	4,270	7,253	11,523		37	37	52
									53
						610		610	54
									55
	33	33				134	231	365	56
									57
									58
						32		32	59
			5		5	85	50	135	60
	231	231		23	23	2,769	19,020	21,789	61
3,075	4,424	7,499	1,118	6,865	7,983	85,748	67,373	153,121	62
						8,309	1,440	9,749	63
							1,996	1,996	64
			5,000		5,000	920		920	65
						24		24	66
10		10	22	14	36	49,445	146	49,951	67
	150	150				11,489	3,597	15,086	68
	60	60	46,995	15,220	62,215		24	24	69
				69	69		7,531	7,531	70
									71
									72
				136	136	72	66,438	66,510	73
									74
	15,077	15,077		183	183		3,363	3,363	75
									76
			2,830		2,830				77
3		3				446	1,366	1,812	78
			46,732		46,732	6,399		6,399	79
	31	31				4,255	416	4,671	80
	115,567	115,567		5,998	5,998	20,015	37,682	57,697	81
	120,497	120,497	651,402	35,790	687,192	74	4,756	4,830	82
									83
									84
1,553		1,553	12,832		12,832	44,545		44,545	85
									86
	26	26							87
318,238	743,531	1,061,829	2,706,273	441,214	3,147,487	2,278,055	818,361	3,096,416	

TABLE 11.—SUMMARY of Freight Traffic

Number.	Name of Railway.	65	66	67	68	69	70	71
			PRODUCTS OF MINES—*Con.*			PRODUCTS OF		
			OTHER PRODUCTS OF MINES.			LUMBER.		
			Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.
1	Alberta Railway and Irrigation Co.		44	96	140	3,340	8,893	12,233
2	Algoma Central and Hudson Bay					804	27	831
3	Atlantic and Lake Superior					5,328	137	5,465
4	Atlantic, Quebec and Western					1,491	878	2,369
5	Bay of Quinte					8,768	4,242	13,010
6	Bedlington and Nelson					60	55	115
7	Bessemer and Barry's Bay					45		45
8	Brandon, Saskatchewan and Hudson Bay					519	660	1,179
9	British Yukon						637	637
10	Brockville, Westport and Northwestern					95	448	543
11	Canada Southern		57,723	45,446	103,169	10,027	149,209	159,236
12	Canadian Govt.—Intercolonial					352,660	9,055	361,715
13	" " —P. E. Island					13,570	114	13,684
14	Canadian Northern					720,089	72,718	792,807
15	Canadian Northern, Ontario					60,230	693	60,923
16	Canadian Northern, Quebec		3,852	3,126	6,978	41,750	10,408	52,158
17	Canadian Pacific					2,079,631	489,708	2,569,339
18	Cape Breton					55	47	102
19	Caraquet					14,250		14,250
20	Carillon and Grenville							
21	Central Ontario					27,482	5,375	32,857
22	Crowsnest Southern					18,659	595	19,254
23	Cumberland Railway and Coal Co.					19,446		19,446
24	Dominion Atlantic					82,595	2,185	84,780
25	Elgin and Havelock					9,977		9,977
26	Eastern British Columbia							
27	Grand Trunk		38,245	21,658	59,903	595,544	1,083,986	1,679,530
28	Grand Trunk (Canada Atlantic)		101	4,160	4,261	254,038	64,988	319,026
29	Halifax and Southwestern					74,004	711	74,715
30	Hampton and St. Martin's					5,325		5,325
31	Hereford		43	66	109	17,534	340	17,874
32	Inverness Railway and Coal Co.		3,205		3,205	421	2,115	2,536
33	Irondale, Bancroft and Ottawa					5,452		5,452
34	Kaslo and Slocan					308		308
35	Kent Northern					879		879
36	Kettle River Valley					42		42
37	Kingston and Pembroke					16,798	6,221	23,019
38	Klondike Mines					119		119
39	Liverpool and Milton					5,840		5,840
40	London and Port Stanley		1,942	4,404	6,346	8,801	26,401	35,202
41	Lotbinière and Atlantic			47	47	15,606	148	15,754
42	Manitoulin and North Shore					114		114
43	Maritime Coal, Rly. and Power Co.					634	1,404	2,038
44	Massawippi Valley					8,077	47,418	55,495
45	Midland Railway of Manitoba			15	15	39	857	896
46	Moncton and Buctouche					4,578		4,578
47	Montreal and Atlantic					70,616	76,869	147,485
48	Montreal and Province Line					462	13,190	13,652
49	Montreal and Vermont Junction			26,027	26,027	167	36,293	36,460

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Movement for the Year ending June 30, 1909—*Continued.*

72	73	74	75	76	77	78	79	80	
FORESTS.			MANUFACTURES.						
OTHER PRODUCTS OF FORESTS.			PETROLEUM AND OTHER OILS.			SUGAR.			
Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.	Number.
567	858	1,425	223	140	363	2,526	1,122	3,648	1
112,407	.....	112,407	48	.....	48	54	.....	54	2
3	.....	3	.....	560	560	.....	.....	.....	3
.....	.....	.....	6	132	138	3	15	18	4
1,110	608	1,718	743	.....	743	.....	.....	.....	5
1,944	.....	1,944	.....	.....	.....	.....	.....	.....	6
69	.....	69	.....	.....	.....	.....	.....	.....	7
1,358	241	1,599	.....	.....	.....	.....	47	47	8
.....	.....	.....	.....	28	28	.....	303	303	9
.....	.....	.....	.....	720	720	.....	700	700	10
24,076	59,760	83,836	6,598	54,786	61,384	1,647	47,848	49,495	11
550,893	1,789	552,682	16,796	8,465	25,261	48,057	882	48,929	12
.....	.....	.....	617	198	815	1,058	119	1,177	13
.....	.....	.....	10,086	6,054	16,140	11,521	7,320	18,841	14
21,929	182	22,111	550	60	610	604	64	668	15
68,628	116,999	185,627	.....	1,792	1,792	.....	.....	.....	16
.....	.....	.....	36,429	80,821	117,250	107,602	41,435	149,037	17
689	35	724	.....	1	1	.....	.....	.....	18
1,000	.....	1,000	.....	65	65	.....	60	60	19
.....	.....	.....	.....	.....	.....	.....	.....	.....	20
28,830	2,563	31,393	1,515	588	2,103	1	383	384	21
1,526	150	1,676	.....	119	119	.....	.....	.....	22
.....	.....	.....	.....	.....	.....	.....	.....	.....	23
7,762	255	8,017	1,564	233	1,797	1,939	162	2,101	24
.....	.....	.....	.....	95	95	29	124	153	25
1,577	.....	1,577	2	.....	2	.....	.....	.....	26
548,676	525,252	1,073,928	71,883	71,466	143,349	36,105	47,047	83,152	27
124,428	74,883	199,311	2,072	11,302	13,374	135	108,784	108,919	28
64,803	153	64,956	761	75	836	660	46	706	29
140	.....	140	.....	.....	.....	.....	.....	.....	30
91,207	30	91,237	23	56	79	92	42	134	31
2,577	.....	2,577	67	209	276	9	83	92	32
22,795	.....	22,795	.....	49	49	.....	69	69	33
.....	.....	.....	.....	.....	.....	.....	.....	.....	34
2,691	.....	2,691	.....	.....	.....	.....	.....	.....	35
270	.....	270	.....	.....	.....	.....	.....	.....	36
.....	.....	.....	71	840	911	562	1,747	2,309	37
4,252	.....	4,252	.....	.....	.....	.....	.....	.....	38
37,772	.....	37,772	.....	.....	.....	.....	.....	.....	39
27,428	10,601	38,029	1,465	3,260	4,725	1,001	3,353	4,354	40
15,506	.....	15,506	.....	190	190	.....	11	11	41
15,754	.....	15,754	12	.....	12	7	.....	7	42
.....	.....	.....	.....	137	137	2	63	65	43
20,644	140,755	161,399	.....	585	585	.....	399	399	44
994	103	1,097	.....	.....	.....	.....	.....	.....	45
10,343	.....	10,343	.....	.....	.....	.....	.....	.....	46
.....	.....	.....	86	3,984	4,070	687	11,923	12,610	47
.....	.....	.....	.....	22	22	.....	72	72	48
2,382	9,409	11,791	.....	3,228	3,228	.....	65,713	65,713	49

TABLE 11.—SUMMARY of Freight Traffic

Number.	Name of Railway.	65	66	67	68	69	70	71
			PRODUCTS OF MINES—*Con.*			PRODUCTS OF		
			OTHER PRODUCTS OF MINES.			LUMBER.		
			Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.
50	Morrissey, Fernie and Michel							
51	Napierville Junction Railway					85	49,326	49,411
52	Nelson and Fort Sheppard					9,946	460	10,406
53	New Brunswick Coal and Ry. Co					7,472		7,472
54	New Brunswick and P.E. Island					17,678	310	17,988
55	New Brunswick Southern					7,468	16	7,484
56	New Westminster Southern					26,428	4,972	31,400
57	North Shore					190		190
58	Nosbonsing and Nipissing							
59	Nova Scotia Steel and Coal Co					5,700	24	5,724
60	Orford Mountain		833		833	14,027	37	14,064
61	Ottawa and New York		22	439	461	1,715	4,175	5,890
62	Père Marquette, in Canada		10,185	22,955	33,140	45,960	137,882	183,842
63	Philipsburg Ry. and Quarry Co.						265	265
64	Princeton Br. of Washington Co. Ry			3,521	3,521		6,143	6,143
65	Quebec Central		58,322		58,322	79,532		79,532
66	Quebec and Lake St. John					54,250	8,969	63,219
67	Quebec Ry. Light and Power Co					5,031	138	5,169
68	Quebec, Montreal and Southern					4,807	125,087	129,894
79	Red Mountain			4,811	4,811	437	861	1,298
70	Rutland and Noyan						19,159	19,159
71	Salisbury and Harvey		17,747		17,747	14,682		14,682
72	Schomberg and Aurora							
73	Stanstead, Shefford and Chambly			26,027	26,027	2,874	38,000	40,874
74	St. Clair Tunnel							
75	St. Lawrence and Adirondack			2,365	2,365	501	69,806	70,307
76	Sydney & Louisburg (Dom. Coal Co.)					20,160	28,160	48,320
77	Spokane and B. C. Ry. Co.					802		802
78	Temiscouata					99,486	67	99,553
79	Temiskaming and Northern Ontario					47,247	4,453	51,700
80	Thousand Islands					599	2,759	3,358
81	Toronto, Hamilton and Buffalo		205	6,164	6,369	1,796	6,748	8,544
82	Vancouver, Victoria and Eastern		6,622	15	6,637	14,992	13,580	28,572
83	Victoria and Sydney, B.C					2,310	1,062	3,372
84	Victoria Terminal and Ferry Co					211	3,161	3,372
85	Wabash Co., in Canada		6,654		6,654	66,066		66,066
86	Wellington Colliery Co						1,833	1,833
87	York and Co					6,189	5	6,194
	Final total		205,745	171,342	377,087	5,114,910	2,644,483	7,759,393

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Movement for the Year ending June 30, 1909—*Continued.*

72	73	74	75	76	77	78	79	80	
FORESTS.			MANUFACTURES.						
OTHER PRODUCTS OF FORESTS.			PETROLEUM AND OTHER OILS.			SUGAR.			
Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.	Number.
									50
				85	85		21	21	51
12,935	76	13,011		29	29				52
2,016		2,016							53
866		866		88	88		600	600	54
			92		92	83		83	55
1,112	641	1,753		748	748		166	166	56
15		15							57
16,310		16,310							58
				18	18		19	19	59
12,704	15	12,719	1	59	60	44	129	173	60
1,259	7,406	8,665	253	175	428	91	79	170	61
143,237	55,360	198,597	7,649	17,025	24,674	5,230	17,508	22,738	62
									63
	30,645	30,645		184	184		38	38	64
252,767		252,767		4,231	4,231		3,077	3,077	65
108,592	23,741	132,333		434	434		423	423	66
13,500	182	13,682	107	2	109	218		218	67
				856	856		34	34	68
1,377	7,836	9,213							69
	103,940	103,940		151	151				70
5,384		5,384							71
									72
44	9,178	9,222		3,313	3,313		65,802	65,802	73
									74
362	20,804	21,166		1,903	1,903	5	44,472	44,477	75
				1,040	1,040		110	110	76
440		440							77
			247	260	507	230	119	349	78
186,424		186,424		2,527	2,527				79
	223	223		103	103				80
886	3,818	4,704	742	4,244	4,986	14	310	324	81
2,463	2,334	4,797	186	897	1,083	285		285	82
11,115	17	11,132							83
	11,132	11,132							84
22,643		22,643	15,354		15,354	7,931		7,931	85
	159	159		73	73		14	14	86
									87
2,613,481	1,222,133	3,835,614	176,248	288,705	464,953	228,432	472,887	701,319	

TABLE No. 11—SUMMARY of Freight Traffic

Number.	81	82	83	84	85	86	87
		MANUFAC					
		NAVAL STORES.			IRON, PIG AND BLOOM.		
	NAME OF RAILWAY.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.
1	Alberta Railway and Irrigation Co.				5	20	25
2	Algoma Central and Hudson Bay						
3	Atlantic and Lake Superior						
4	Atlantic, Quebec and Western				1	136	137
5	Bay of Quinté				2,236	28	2,264
6	Bedlington and Nelson						
7	Bessemer and Barry's Bay						
8	Brandon, Saskatchewan and Hudson Bay					16	16
9	British Yukon		350	350			
10	Brockville, Westport and Northwestern						
11	Canada Southern				2,038	26,244	28,282
	Canadian Govt. Railwys—						
12	Intercolonial				108,264	687	108,951
13	P. E. Island	8		8	381	154	535
14	Canadian Northern					3,079	3,079
15	Canadian Northern, Ontario						
16	Canadian Northern, Quebec		14,218	14,218			
17	Canadian Pacific	8	193	201	65,811	112,690	178,501
18	Cape Breton						
19	Caraquet					45	45
20	Carillon and Grenville						
21	Central Ontario				2,411	300	2,711
22	Crowsnest Southern						
23	Cumberland Railway and Coal Co.						
24	Dominion Atlantic	345		345	684		684
25	Elgin and Havelock					84	84
26	Eastern British Columbia				5		5
27	Grand Trunk	3,754	387	4,141	89,187	92,814	182,001
28	Grand Trunk (Canada Atlantic)		10	10	610	7,094	7,704
29	Halifax and Southwestern						
30	Hampton and St. Martin's						
31	Hereford		15	15		14	14
32	Inverness Railway and Coal Co.					18	18
33	Irondale, Bancroft and Ottawa						
34	Kaslo and Slocan						
35	Kent Northern						
36	Kettle River Valley						
37	Kingston and Pembroke				10	86	96
38	Klondike Mines						
39	Liverpool and Milton						
40	London and Port Stanley	249	45	294	489	2,568	3,057
41	Lotbinière and Megantic				20	16	36
42	Manitoulin and North Shore						
43	Maritime Coal Rly. and Power Co.		4	4	136	18	154
44	Massawippi Valley	24	44	68	31	442	473
45	Midland Railway of Manitoba						
46	Moncton and Buctouche						
47	Montreal and Atlantic				27	15,938	15,965
48	Montreal and Province Line						
49	Montreal and Vermont Junction						

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Movement for the Year ending June 30, 1909—*Continued.*

88	89	90	91	92	93	94	95	96	

TURES—*Continued.*

Iron and Steel Rails.			Other Castings and Machinery.			Bar and Sheet Metal.			
Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Tonnage.	Number.
1	41	42	227	397	624	7	31	38	1
566	21	587	225		225				2
			2,011	5,851	7,862				3
	1,497	1,497	68	2,513	2,581		8	8	4
23		23	741	80	821				5
	139	139		15	15				6
									7
			20	167	187		45	45	8
				2,473	2,473		88	88	9
			150	710	860		730	730	10
1,525	9,246	10,771	26,909	131,926	158,835	10,645	114,592	125,237	11
90,309	1,089	91,398	240,973	10,784	251,757	12,758	487	13,245	12
459	180	639	497	384	881	101	30	131	13
	101,935	101,935	9,109	9,313	18,422	1,505	1,557	3,062	14
295	1,475	1,770	444	261	705	202	45	247	15
	2,318	2,318	672	5,921	6,593				16
53,086	47,201	100,287	65,243	98,729	163,972	37,416	27,151	64,567	17
									18
				50	50				19
									20
	659	659	382	866	1,248	18	35	53	21
157	803	960	31	1,033	1,064		382	382	22
									23
85		85	700	956	1,656	183	449	632	24
						10		10	25
	2	2							26
27,016	28,454	55,470	59,607	57,325	116,932	27,872	15,996	43,868	27
110	11,369	11,479	553	8,975	9,528	209	3,068	3,277	28
3	542	545	418	549	967				29
				120	120		20	20	30
	78	78	50	44	94	5	124	129	31
15	20	35	53	134	187		44	44	32
			20	56	76				33
				10	10				34
			12		12				35
			45		45				36
5	7	12	89	389	478	21	126	147	37
									38
									39
5	551	556	1,425	6,959	8,384	96	506	602	40
	2,495	2,495	229	433	662		2	2	41
53		53	48		48				42
	130	130	84	219	303		27	27	43
119	629	748	310	571	881	39	135	174	44
67	70	137	10	354	364		2,308	2,308	45
									46
1	1,228	1,229	548	7,771	8,319	14	159	173	47
	116	116							48
			23	12,926	12,949				49

TABLE No. 11—SUMMARY of Freight Traffic

Number.	NAME OF RAILWAY.	81	82	83	84	85	86	87
			MANUFAC					
			NAVAL STORES.			IRON, PIG AND BLOOM.		
			Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
50	Morrissey, Fernie and Michel							
51	Napierville Junction Railway					16		16
52	Nelson and Fort Sheppard							
53	New Brunswick Coal and Ry. Co							
54	New Brunswick and P.E. Island							
55	New Brunswick Southern							
56	New Westminster Southern						34	34
57	North Shore							
58	Nosbonsing and Nipissing							
59	Nova Scotia Steel and Coal Co		17	87	104			
60	Orford Mountain						136	136
61	Ottawa and New York		12	150	162	103	105	208
62	Père Marquette, in Canada		1,304	389	1,693	2,554	13,411	15,965
63	Phillipsburg Railway and Quarry Co.							
64	Princeton Branch of Washington Co. Railway						1,116	1,116
65	Quebec Central						2,693	2,693
66	Quebec and Lake St. John						407	407
67	Quebec Railway, Light and Power Co		3	2	5	272	28	300
68	Quebec, Montreal and Southern					583	819	1,402
69	Red Mountain							
70	Rutland and Noyan							
71	Salisbury and Harvey							
72	Schomberg and Aurora							
73	Stanstead, Shefford and Chambly					152	13,176	13,328
74	St. Clair Tunnel							
75	St. Lawrence and Adirondack		2	617	619		643	643
76	Sydney & Louisburg (Dom. Coal Co.)							
77	Spokane and British Columbia Ry							
78	Temiscouata		30		30	23	82	105
79	Temiskaming and Northern Ontario							
80	Thousand Islands					998	283	1,281
81	Toronto, Hamilton and Buffalo					5,187	8,766	13,953
82	Vancouver, Victoria and Eastern			79	79	62	25	87
83	Victoria and Sidney, B.C							
84	Victoria Terminal and Ferry Co							
85	Wabash Railway Co., in Canada		163		163	7,439		7,439
86	Wellington Colliery Co							
87	York and Carleton							
	Final total		5,919	16,590	22,509	289,736	304,214	593,950

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Movement for the Year ending June 30, 1909—*Continued.*

88	89	90	91	92	93	94	95	96

TURES—*Continued.*

Iron and Steel Rails.			Other Castings and Machinery.			Bar and Sheet Metal.			Number.
Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	
.....	.....	.....	.....	.....	.....	.....	.....	.....	50
.....	.....	.....	.....	386	386	.....	22	22	51
.....	.....	.....	47	60	107	.....	72	72	52
.....	.....	.....	.....	.....	.....	.....	.....	.....	53
.....	.....	.....	.....	225	225	.....	140	140	54
.....	.....	.....	169	36	205	34	2	36	55
1,520	853	2,373	162	2,615	2,777	20	1,375	1,395	56
.....	.....	.....	.....	.....	.....	.....	.....	.....	57
.....	.....	.....	.....	.....	.....	.....	.....	.....	58
.....	.....	.....	13	31	44	.....	2	2	59
.....	.....	.....	36	115	151	1	41	42	50
24	213	237	589	1,292	1,881	166	716	882	61
29	2,874	2,903	7,443	36,340	43,783	503	2,642	3,145	62
20	370	390	.....	.....	.....	.....	.....	.....	63
.....	.....	.....	.....	627	627	.....	.....	.....	64
.....	5,670	5,670	1,500	808	2,308	.....	3,847	3,847	65
.....	5,316	5,316	1,027	3,929	4,956	.....	.....	.....	66
15	1	16	542	96	638	65	8	73	67
.....	3,168	3,168	806	3,368	4,174	182	1,628	1,810	68
.....	.....	.....	10	32	42	31	110	141	69
.....	1,808	1,808	.....	325	325	.....	.....	.....	70
.....	.....	.....	.....	.....	.....	.....	.....	.....	71
.....	.....	.....	.....	.....	.....	.....	.....	.....	72
.....	.....	.....	.....	.....	.....	.....	.....	.....	73
.....	.....	.....	.....	.....	.....	.....	.....	.....	74
.....	64	64	89	3,393	3,482	.....	2,021	2,021	75
920	480	1,400	.....	.....	.....	7	112	119	76
.....	.....	.....	.....	.....	.....	.....	.....	.....	77
620	564	1,184	537	1,186	1,723	272	1,012	1,284	78
.....	22,027	22,027	.....	.....	.....	.....	.....	.....	79
.....	.....	.....	.....	.....	.....	.....	4,424	4,424	80
84	1,232	1,316	2,732	18,185	20,917	1,171	23,353	24,524	81
2,000	6,607	8,607	748	3,269	4,017	278	1,175	1,453	82
.....	.....	.....	.....	.....	.....	.....	.....	.....	83
.....	.....	.....	.....	.....	.....	.....	.....	.....	84
4,004	.....	4,004	23,891	.....	23,891	33,188	.....	33,188	85
.....	.....	.....	.....	.....	.....	.....	.....	.....	86
.....	.....	.....	.....	.....	.....	.....	.....	.....	87
183,136	263,542	446,678	452,267	445,582	897,849	127,019	210,847	337,866	

TABLE No. 11—SUMMARY of Freight Traffic

Number.	Name of Railway.	97	98	99	100	101	102	103
			MANUFAC					
			CEMENT, BRICK AND LIME.			AGRICULTURAL IMPLEMENTS.		
			Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
1	Alberta Railway and Irrigation Co.		653	327	980	475	471	946
2	Algoma Central and Hudson Bay.		39	.....	39	.....	.....	.....
3	Atlantic and Lake Superior		.....	.....	.....	78	183	261
4	Atlantic, Quebec and Western		10	197	207	1	29	30
5	Bay of Quinté		42,303	270	42,573	69	6	75
6	Bedlington and Nelson		.....	19	19	.....	.....	.....
7	Bessemer and Barry's Bay		.....	.....	.....	.....	.....	.....
8	Brandon, Saskatchewan and Hudson Bay		23	482	505	52	692	744
9	British Yukon		.....	.....	.....	.....	.....	.....
10	Brockville, Westport and Northwestern		2,140	320	2,460	40	1,510	1,550
11	Canada Southern		7,248	67,506	74,754	4,645	41,014	45,659
12	Canadian Government--Intercolonial		82,844	12,264	95,108	1,371	5,378	6,749
13	Canadian Government--P. E. Island		1,358	259	1,617	651	47	698
14	Canadian Northern		23,472	27,184	50,656	22,813	7,215	30,028
15	Canadian Northern Ontario		1,889	1,534	3,423	164	58	222
16	Canadian Northern Quebec		42,027	6,408	48,435	.....	517	517
17	Canadian Pacific		469,428	124,100	593,528	65,409	36,105	101,514
18	Cape Breton		40	.....	40	.....	7	7
19	Caraquet		.....	87	87	.....	160	160
20	Carillon and Grenville		.....	.....	.....	.....	.....	.....
21	Central Ontario		209	8,277	8,486	.....	102	102
22	Crowsnest Southern		1,178	1,855	3,033	.....	.....	.....
23	Cumberland Railway and Coal Co.		.....	.....	.....	.....	.....	.....
24	Dominion Atlantic		7,508	625	8,133	526	186	712
25	Elgin and Havelock		100	.....	100	20	.....	20
26	Eastern British Columbia		30	16	46	.....	.....	.....
27	Grand Trunk		407,185	158,286	565,471	30,428	24,263	54,691
28	Grand Trunk—Canada Atlantic		16,694	17,321	34,015	756	3,246	4,002
29	Halifax and Southwestern		501	1,299	1,800	133	157	290
30	Hampton and St. Martins		.....	.....	.....	.....	.....	.....
31	Hereford		8,189	418	8,607	2	42	44
32	Inverness Railway and Coal Co.		37	233	270	5	5	10
33	Irondale, Bancroft and Ottawa		.....	83	83	.....	30	30
34	Kaslo and Slocan		.....	.....	.....	.....	.....	.....
35	Kent Northern		.....	.....	.....	.....	.....	.....
36	Kettle River Valley		.....	.....	.....	.....	.....	.....
37	Kingston and Pembroke		342	1,831	2,173	51	55	106
38	Klondike Mines		.....	.....	.....	.....	.....	.....
39	Liverpool and Milton		.....	.....	.....	.....	.....	.....
40	London and Port Stanley		5,564	7,684	13,248	176	750	926
41	Lotbinière and Mégantic		88	19	107	9	36	45
42	Manitoulin and North Shore		.....	.....	.....	.....	.....	.....
43	Maritime Coal Railway & Power Co.		2	192	194	.....	70	70
44	Massawippi Valley		249	641	890	99	44	143
45	Midland Railway of Manitoba		.....	141	141	60	231	291
46	Moncton and Buctouche		.....	.....	.....	.....	.....	.....
47	Montreal and Atlantic		3,979	5,841	9,820	454	1,014	1,468
48	Montreal and Province Line		302	962	1,264	.....	.....	.....
49	Montreal and Vermont Junction		45	2,973	3,018	.....	2,774	2,77

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Movement for the Year ending June 30, 1909—*Continued.*

104	105	106	107	108	109	110	111	112	

TURES—*Continued.*

Wagons, Carriages, Tools, &c.			Wines, Liquors and Beers.			Household Goods and Furniture.			
Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Number.
2,316	962	3,278	4		4	1,045	486	1,531	1
						26		26	2
17	243	260		4,547	4,547	1,093	4,023	5,116	3
6	34	40	15	63	78	13	65	78	4
571	214	785	113		113	375	30	405	5
									6
									7
	25	25		32	32		333	333	8
				639	639		72	72	9
100	260	360	240	360	600	190	372	562	10
10,825	16,870	27,695	1,438	11,577	13,015	3,325	14,198	17,523	11
						2,323	3,361	5,684	12
231	87	318	281	148	429	347	114	461	13
6,304	2,618	8,922	10,984	4,510	15,494	28,763	17,634	46,397	14
462	157	619	977	335	1,312	689	174	863	15
	927	927	372	13,825	14,197	380	808	1,188	16
18,916	6,254	25,170	51,898	22,580	74,478	80,268	19,344	99,612	17
							4	4	18
	40	40		200	200		110	110	19
									20
1	253	254	32	1,045	1,077	1,327	1,047	2,374	21
	68	68	5	69	74		419	419	22
									23
			86	9	95	1,453	217	1,670	24
10		10		2	2	10	326	336	25
						2		2	26
11,817	13,051	24,868	30,904	21,480	52,384	36,120	28,854	64,974	27
1,387	950	2,337	467	5,981	6,448	989	1,953	2,942	28
76	88	164	1,333	271	1,604	572	305	877	29
									30
18	46	64	16	111	127	625	181	806	31
14	4	18	29	79	108	56	53	109	32
	13	13		54	54	53	34	87	33
									34
									35
									36
12	34	46	128	470	598	413	63	476	37
									38
									39
1,204	1,205	2,409	876	514	1,390	827	794	1,621	40
4	8	12		6	6	78	28	106	41
									42
	17	17		50	50	71	78	149	43
183	69	252	176	151	327	360	1,052	1,412	44
	127	127		42	42		110	110	45
									46
35	628	663	455	6,101	6,556	1,221	2,657	3,878	47
	42	42				162		162	48
				4,594	4,594	2	3,099	3,101	49

TABLE No. 11—SUMMARY of Freight Traffic

Number.	97	98	99	100	101	102	103
							MANUFAC
	NAME OF RAILWAY.	CEMENT, BRICK AND LIME.			AGRICULTURAL IMPLEMENTS.		
		Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.
50	Morrissey, Fernie and Michel						
51	Napierville Junction Railway		2,694	2,694		12	12
52	Nelson and Fort Sheppard	10	184	194		31	31
53	New Brunswick Coal and Ry. Co						
54	New Brunswick and P. E. Island		150	150		175	175
55	New Brunswick Southern	222	1	223	21	2	23
56	New Westminster Southern	122	1,270	1,392			
57	North Shore						
58	Nosbousing and Nipissing						
59	Nova Scotia Steel and Coal Co	15	2	17			
60	Orford Mountain	3	455	458	3	64	67
61	Ottawa and New York	6,753	2,068	8,821	18	28	46
62	Père Marquette (in Canada)	29,057	40,126	69,183	919	3,919	4,838
63	Philipsburg Railway and Quarry Co		310	310			
64	Princeton Branch of Washington Co. Railway		225	225			
65	Quebec Central	20,728		20,728		5,385	5,385
66	Quebec and Lake St. John	4,524	3,277	7,801		1,436	1,436
67	Quebec Railway, Light and Power Co	4,011	419	4,430	79	10	89
68	Quebec, Montreal and Southern	2,953	2,900	5,853		28	28
69	Red Mountain						
70	Rutland and Noyan		1,045	1,045			
71	Salisbury and Harvey						
72	Schomberg and Aurora						
73	Stanstead, Shefford and Chambly	41	2,935	2,976		2,774	2,774
74	St. Clair Tunnel						
75	St. Lawrence and Adirondack	32	4,604	4,636		504	504
76	Sydney and Louisburg, (Dom. Coal Co)	1,220	580	1,800			
77	Spokane and British Columbia Ry						
78	Temiscouata	999	3,925	4,924	36	109	145
79	Temiskaming and Northern Ontario	5,773	6,534	12,307	1,437	2,313	3,750
80	Thousand Islands		682	682			
81	Toronto, Hamilton and Buffalo	2,255	6,934	9,189	22,933	3,980	26,913
82	Vancouver, Victoria and Eastern	417	3,323	3,740	7	241	248
83	Victoria and Sidney, B.C.						
84	Victoria Terminal and Ferry Co						
85	Wabash Railway Co. (in Canada)	50,854		50,854	5,376		5,376
86	Wellington Colliery Co		32	32			
87	York and Carleton						
	Total	1,255,665	534,329	1,789,994	159,316	147,408	306,724

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Movement for the Year ending June 30, 1009—*Continued.*

104	105	106	107	108	109	110	111	112	

TURES—*Continued.*

Waggons, Carriages, Tools, &c.			Wines, Liquors and Beers.			Household Goods and Furniture.			
Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Number.
									50
						20		20	51
	11	11		154	154		44	44	52
									53
	390	390					130	130	54
20	17	37	312	1	313	69	5	74	55
	237	237	39	258	297	12	1,449	1,461	56
									57
									58
1		1		2	2	10	1	11	59
2	66	68	25	94	119	57	72	129	60
103	39	142	281	56	337	312	178	490	61
6,290	6,289	12,579	4,572	2,685	7,257	4,317	4,148	8,465	62
									63
							32	32	64
	1,539	1,539	2,884	1,154	4,038	2,404	4,616	7,020	65
	1,011	1,011	2,970	597	3,567	256	153	409	66
40	9	49	1,533	1	1,534	258	50	308	67
73	33	106	176	184	360	193	56	249	68
	7	7		171	171				69
	1	1					11	11	70
									71
									72
				4,596	4,596	60	3,116	3,176	73
									74
2	206	208	6	384	390	295	761	1,056	75
			40	32	72	82	90	172	76
	13	13	2		2	2		2	77
68	126	194	212	940	1,152	212	306	518	78
						707	1,243	1,950	79
									80
334	255	589	81	695	776	215	295	510	81
	387	387	183	544	727	56	1,937	1,993	82
									83
									84
2,501		2,501	12,262		12,262	7,587		7,587	85
				8	8		8	8	86
									87
58,883	60,580	119,463	126,407	112,401	238,808	180,302	121,099	301,401	

TABLE No. 11—Summary of Freight Traffic

Number.	113	114	115	116	117	118	119
		MANUFACTURES—*Con.*			MERCHANDISE.		
		OTHER MANUFACTURES.			—		
	NAME OF RAILWAY.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.
1	Alberta Railway and Irrigation Co.	19	39	58	2,485	1,615	4,100
2	Algoma Central and Hudson Bay				1,266		1,266
3	Atlantic and Lake Superior						
4	Atlantic, Quebec and Western				110	541	651
5	Bay of Quinte						
6	Bedlington and Nelson				6	25	31
7	Bessemer and Barry's Bay					1,031	1,031
8	Brandon, Sask. and Hudson Bay	5	286	291	1,168	407	1,575
9	British Yukon				765	6,451	7,216
10	Brockville, Westport and Northwestern				1,170	2,194	3,364
11	Canada Southern	85,751	793,887	879,638			
12	Canadian Gov't.—Intercolonial						
13	" " P. E. Island						
14	Canadian Northern	48,888	25,046	73,934	28,614	14,659	43,273
15	Canadian Northern, Ontario	1,943	265	2,208	2,563	684	3,247
16	Canadian Northern, Quebec	6,500	7,459	13,959			
17	Canadian Pacific				93,599	242,390	335,989
18	Cape Breton	19		19	98	358	456
19	Caraquet		100	100	420	2,054	2,474
20	Carillon and Grenville						
21	Central Ontario		1,342	1,342	9,994	9,098	19,092
21	Crowsnest Southern	36	512	548	896	420	1,316
23	Cumberland Railway and Coal Co.	1,274	7,363	8,637			
24	Dominion Atlantic				3,244	14,330	17,574
25	Elgin and Havelock	1,082	644	1,726			
26	Eastern British Columbia				128		128
27	Grand Trunk	131,028	109,843	240,871	414,788	516,337	931,125
28	Grand Trunk—Canada Atlantic	10,951	30,715	41,666	14,067	253,260	267,327
29	Halifax and Southwestern	1,462	371	1,833			
30	Hampton and St. Martins		280	280	250	1,600	1,850
31	Hereford	490	60	550	869	1,300	2,169
32	Inverness Railway and Coal Co				310	262	572
33	Irondale, Bancroft and Ottawa				11	860	871
34	Kaslo and Slocan				799	12	811
35	Kent Northern						
36	Kettle River Valley		—		49		49
37	Kingston and Pembroke				5,849	5,579	11,428
38	Klondike Mines				1,677		1,677
39	Liverpool and Milton	161		161			
40	London and Port Stanley	5,859	2,757	8,616	28,890	12,381	41,271
41	Lotbinière and Megantic		144	144	218	654	872
42	Manitoulin and North Shore	4		4	333		333
43	Maritime Coal and Railway Co						
44	Massawippi Valley	14,760	1,236	15,996	1,363	2,812	4,175
45	Midland Ry. of Manitoba		216	216	341	283	624
46	Moncton and Buctouche	3,370		3,370			
47	Montreal and Atlantic				109	7,215	7,324
48	Montreal and Province Line				2,940	14,197	17,137
49	Montreal and Vermont Junction				671	91,900	92,571
50	Morrissey, Fernie and Michel					15,102	15,102

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Movement for the Year ending June 30, 1909—*Continued.*

120	121	122	123	124	125	A	B	C	
MISCELLANEOUS.			RECAPITULATION.			——			
OTHER COMMODITIES.			GRAND TOTAL.			——			
Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Number.
1,203	1,701	2,904	96,901	54,084	150,985				1
			361,950	983	362,933				2
7,457	3,646	11,103	16,238	21,781	38,019				3
			3,975	9,295	13,270				4
24,709	3,913	28,622	92,403	49,372	141,775				5
	105	105	2,053	447	2,500				6
			18,864	2,505	21,369				7
207	371	578	58,995	13,663	72,658				8
	384	384	1,754	22,199	23,953				9
			7,579	14,334	21,913				10
26,398	237,581	263,979	621,135	5,334,116	5,955,251				11
283,183	74,897	358,080	3,157,187	395,552	3,552,739				12
29,777	4,157	33,934	103,143	8,297	111,440				13
298,760	59,484	358,244	2,284,300	674,502	2,958,802				14
7,954	259	8,213	175,051	26,245	201,296				15
24,430	8,143	32,573	196,405	289,414	485,819				16
1,546,785	614,006	2,160,791	11 617,107	4,084,169	15,701,276				17
1,003	140	1,143	2,327	1,108	3,435				18
			19,775	5,018	24,793				19
10	25	35	15	40	55				20
9,127	4,809	13,936	139,596	91,835	231,431				21
997	775	1,772	115,437	127,055	242,492				22
			360,294	18,137	378,431				23
17,020	12,247	29,267	252,287	82,301	334,588				24
			12,250	2,913	15,163				25
			19,079	18	19,097				26
701,749	854,833	1,556,582	5,441,495	9,077,196	14,518,691				27
69,456	114,216	183,672	563,629	1,694,958	2,258,587				28
4,616	1,858	6,474	165,555	19,508	185,063				29
340	2,471	2,811	11,035	5,071	16,106				30
50	123	173	120,933	8,049	128,982				31
585	3,672	4,257	265,106	9,994	275,100				32
			28,575	3,457	32,032				33
	32	32	11,414	231	11,645				34
	3,289	3,289	3,909	4,140	8,049				35
			2,355		2,355				36
5,994	2,504	8,498	69,061	30,421	99,482				37
			6,093		6,093				38
	798	798	43,773	798	44,571				39
10,622	18,883	29,505	166,333	296,843	463,176				40
61	70	131	46,176	5,851	52,027				41
59		59	225,445	1,207	226,652				42
102	538	640	125,097	4,335	129,432				42
11,209	11,572	22,781	125,238	279,732	404,970				43
391	868	1,259	31,776	63,426	95,202				45
			28,540		28,540				46
12,961	267,389	280,350	119,024	880,810	999,834				47
487	3,567	4,054	11,950	51,148	63,098				48
1,169	103,532	104,701	7,055	1,001,660	1,008,715				49
			377,788	15,102	392,890				50

TABLE No. 11.—SUMMARY of Freight Traffic

Number.	113	114	115	116	117	118	119
	NAME OF RAILWAY.	MANUFACTURES—*Con.*			MERCHANDISE.		
		OTHER MANUFACTURES.					
		Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
51	Napierville Junction Ry		27	27	158	588	746
52	Nelson and Fort Sheppard		232	232	1,426	762	2,188
53	New Brunswick Coal and Ry. Co	4,588	17,754	22,342			
54	New Brunswick and P. E. Island					1,460	1,460
55	New Brunswick Southern				57		57
56	New Westminster Southern	148	2,850	2,998	1,345	4,547	5,892
57	North Shore						
58	Nosbonsing and Nipissing						
59	Nova Scotia Steel and Coal Co	11	83	94			
60	Orford Mountain	635		635	55	266	321
61	Ottawa and New York	13,532	4,944	18,476			
62	Père Marquette (in Canada)	30,595	14,398	44,993	150,871	64,659	215,530
63	Philipsburg Ry. and Quarry Co						
64	Princeton Branch of Washington Co. Ry		64,603	64,603		4,651	4,651
65	Quebec Central	17,961	3,946	21,907	11,560	36,860	48,420
66	Quebec and Lake St. John	840	2,360	3,200	2,700	4,942	7,642
67	Quebec Ry., Light and Power Co	6,256	197	6,453			
68	Quebec, Montreal and Southern	41	498	539	6,095	8,302	14,397
69	Red Mountain		145	145	154	467	621
70	Rutland and Noyan		2,299	2,299		806	806
71	Salisbury and Harvey	44	700	744			
72	Schomberg and Aurora						
73	Stanstead, Shefford and Chambly				6,443	95,749	102,192
74	St. Clair Tunnel						
75	St. Lawrence and Adirondack	515	43,729	44,244			
76	Sydney and Louisburg (Dominion Coal Co.)						
77	Spokane and British Columbia Ry				29		29
78	Temiscouata				3,014	2,559	5,573
79	Temiskaming and Northern Ontario	7,400	14,884	22,284	8,242	14,258	22,500
80	Thousand Islands						
81	Toronto, Hamilton and Buffalo	17,357	40,676	58,033			
82	Vancouver, Victoria and Eastern	717	5,220	5,937	4,802	7,320	12,122
83	Victoria and Sydney, B.C				5,149	3,141	8,290
84	Victoria Terminal and Ferry Co				404	7,825	8,229
85	Wabash Ry. Co. in Canada	64,726		64,726	89,900		89,900
86	Wellington Colliery Co						
87	York and Carleton				25	1,623	1,648
	Final total	478,968	1,202,110	1,681,078	912,489	1,480,796	2,393,285

SESSIONAL PAPER No. 20b

Movement for the Year ending June 30, 1909—*Concluded.*

120	121	122	123	124	125	A	B	C	
MISCELLANEOUS.			RECAPITULATION.			——			
OTHER COMMODITIES.			GRAND TOTAL.			——			
Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Number.
16	6,526	6,542	2,125	160,757	162,882	.....	.....	.....	51
63	437	500	28,898	12,814	41,712	.....	.....	.....	52
.....	.....	.....	46,695	19,193	65,888	.....	.....	.....	53
2,410	.....	2,410	26,210	8,603	34,813	.....	.....	.....	54
969	249	1,218	11,618	512	12,130	.....	.....	.....	55
2,106	6,181	8,287	34,510	51,352	85,862	.....	.....	.....	56
.....	5	5	6,762	35	6,797	.....	.....	.....	57
.....	.....	.....	16,310	.....	16,310	.....	.....	.....	58
.....	.....	.....	5,816	1,137	6,953	.....	.....	.....	59
346	746	1,092	30,111	5,882	35,993	.....	.....	.....	60
832	881	1,713	34,754	90,846	125,600	.....	.....	.....	61
55,472	98,617	154,089	965,579	1,453,392	2,418,971	.....	.....	.....	62
.....	.....	.....	8,329	5,124	13,453	.....	.....	.....	63
.....	497	497	.....	150,545	150,545	.....	.....	.....	64
2,865	11,539	14,404	466,098	128,529	594,627	.....	.....	.....	65
22,960	11,110	34,070	210,615	109,854	320,469	.....	.....	.....	66
2,093	311	2,404	101,465	5,680	107,145	.....	.....	.....	67
980	4,051	5,031	45,332	190,414	235,746	.....	.....	.....	68
28	123	151	49,055	33,887	82,942	.....	.....	.....	69
.....	236	236	36	139,362	139,398	.....	.....	.....	70
76	1,000	1,076	38,419	5,242	43,661	.....	.....	.....	71
.....	.....	.....	.....	.....	.....	.....	.....	.....	72
4,695	148,286	152,981	18,726	1,063,753	1,082,479	.....	.....	.....	73
.....	.....	.....	.....	.....	.....	.....	.....	.....	74
313	6,307	6,620	5,933	574,656	580,589	.....	.....	.....	75
15,280	75,183	90,463	3,341,308	115,155	3,456,463	.....	.....	.....	76
.....	.....	.....	4,163	111	4,274	.....	.....	.....	77
2,292	2,464	4,756	116,866	19,509	136,375	.....	.....	.....	78
13,703	6,080	19,783	337,305	197,937	535,242	.....	.....	.....	79
7,911	5,433	13,344	14,612	15,900	30,512	.....	.....	.....	80
9,921	114,097	124,018	96,422	1,137,881	1,234,303	.....	.....	.....	81
3,067	4,429	7,496	699,053	228,883	927,936	.....	.....	.....	82
1,634	4,956	6,590	20,542	9,461	30,003	.....	.....	.....	83
424	6,166	6,590	1,240	28,702	29,942	.....	.....	.....	84
52,162	.....	52,162	1,225,487	.....	1,225,487	.....	.....	.....	85
.....	.....	.....	324,738	4,083	328,821	.....	.....	.....	96
40	75	115	6,514	2,407	8,921	.....	.....	.....	87
3,301,529	2,932,843	6,234,372	36,075,101	30,754,918	66,830,019	.....	.....	.....	

TABLE 12.—SUMMARY of Equipment for the Year ending June 30, 1909.

Number.	Name of Railway.	Locomotives.					Cars in Passenger Service.										Number.
		Passenger.	Freight.	Switching.	Total.	Leased.	First-class.	Second-class	Combination.	Emigrant.	Dining.	Parlour.	Sleeping.	Baggage, express and postal.	Other cars in passenger service.	Total.	
1	Alberta Railway and Irrigation Co	2	3	2	7		4							1		5	1
2	Algoma Central and Hudson Bay	3	6	9	18		4		3							7	2
3	Atlantic and Lake Superior	2	3		5				3							3	3
4	Atlantic, Quebec and Western	1	1		2				1					1	3	5	4
5	Bay of Quinté		7		7		8							3		11	5
6	Bedlington and Nelson		1		1		1									1	6
7	Bessemer and Barry's Bay		3		3	1											7
8	Brandon, Saskatchewan and Hudson Bay		2		2		3									3	8
9	British Yukon		11		11		12							3		15	9
10	Brockville, Westport and Northwestern	4			4		5							1	4	10	10
11	Canada Southern	44	88	26	158		17	25	7	16	2			23	4	94	11
	Canadian Government Railways—																
12	Intercolonial	116	267	26	409		129	43	89	50	9	9	41	67	5	442	12
13	P. E. Island		29	2	31		22	12	7					14		55	13
14	Canadian Northern	56	237	11	304		53	55	4	6	9		20	53		200	14
15	Canadian Northern, Ontario	10	22		32	30	10	11	2		5	2		4		34	15
16	Canadian Northern, Quebec	10	21	1	32	11	11	21	2					9		43	16
17	Canadian Pacific	442	894	142	1,478		565	157	94	239	82	18	193	398	8	1,754	17
18	Cape Breton	2			2		2							2		4	18
19	Caraquet		3		3		2								1	3	19
20	Carillon and Grenville	2			2		2	1	2							5	20
21	Central Ontario	15		1	16		7	1						4		12	21
22	Crowsnest Southern		3		3		2									2	22
23	Cumberland Railway and Coal Co	3	2	1	6		4		3							7	23
24	Dominion Atlantic	11	14		25		22		11		1	2		15		51	24
25	Elgin and Haveloek	1	1		2		1		1							2	25
26	Eastern British Columbia		2		2		2							1		3	26
27	Grand Trunk	189	598	105	892	7	429	64	97	6	17	11		253	2	879	27
28	Grand Trunk (Canada Atlantic)	15	41	5	61		15	7	7			3		7		39	28
29	Halifax and Southwestern	11	6	1	18		17	5	2				2	7		33	29
30	Hampton and St. Martins		2		2		1		1							2	30
31	Hereford	1	2		3		1		2							3	31

32	Inverness Railway and Coal Co.	2	4	1	7	1	2		1					1		4	32
33	Irondale, Bancroft and Ottawa	2		1	3	1			2							2	33
34	Kaslo and Slocan	2	1		3			3								3	34
35	Kent Northern	1	1		2		1									1	35
36	Kettle River Valley																36
37	Kingston and Pembroke		8		8		4	2	2					3	1	12	37
38	Klondike Mines		3		3		1		1							2	38
39	Liverpool and Milton	1			1				1							1	39
40	London and Port Stanley	1	2		3		2		1							3	40
41	Lotbinière and Megantic		3		3			1	1							2	41
42	Manitoulin and North Shore		1	1	2	1	1		1							2	42
43	Maritime Coal Railway and Power Co.	1	2		3				1					1	1	3	43
44	Massawippi Valley	9		1	10		7							6		13	44
45	Midland Railway of Manitoba		2		2		5									5	45
46	Moncton and Buctouche		2		2		2		1							3	46
47	Montreal and Atlantic		12		12			6	11			2		3		22	47
48	Montreal and Province Line	1	2		3		2		1							3	48
49	Montreal and Vermont Junction	4	11		15		11		4					3		18	49
50	Morrissey, Fernie and Michel		3		3			4								4	50
51	Napierville Junction Railway																51
52	Nelson and Fort Sheppard		2		2		3									3	52
53	New Brunswick Coal and Railway Co.		5		5				3							3	53
54	New Brunswick and P. E. Island		3		3		2	1								3	54
55	New Brunswick Southern		2		2		1		2							3	55
56	New Westminster Southern		3		3		20									20	56
57	North Shore	2			2		1									1	57
58	Nosbonsing and Nipissing		1		1												58
59	Nova Scotia Steel and Coal Co.		1		1				1							1	59
60	Orford Mountain	3			3	3	1		2							3	60
61	Ottawa and New York	3			3		2		1					1		4	61
62	Père Marquette (in Canada)	15	33	3	51		15	6	2					5		28	62
63	Philipsburg Railway and Quarry Co.		1		1				1							1	63
64	Princeton Branch of Washington Co. Railway		1		1		1		1							2	64
65	Quebec Central	10	13		23		13	6	7					8		34	65
66	Quebec and Lake St. John	10	11	3	24	3	13	9	4				5	3		34	66
67	Quebec Railway, Light and Power Co.	5			5		4	2	2					2	12	22	67
68	Quebec, Montreal and Southern	7	10		17		7		6							13	68
69	Red Mountain		1		1		2									2	69
70	Rutland and Noyan	1	1		2	2	2		1					1		4	70
71	Salisbury and Harvey		4		4		1									1	71
72	Schomberg and Aurora																72
73	Stanstead, Shefford and Chambly	2	4		6		4		2					1		7	73
74	St. Clair Tunnel			6	6												74
75	St. Lawrence and Adirondack	4	5		9	5	6	1								7	75
76	Sydney and Louisburg (Dominion Coal Co.)	2	13	11	26		2	1	3							6	76
77	Spokane and British Columbia Railway	1	2		3				2							2	77
78	Temiscouata		7		7		2	2	2					2		8	78
79	Temiskaming and Northern Ontario	6	20	2	28		14	21						13		48	79
80	Thousand Islands		2		2				1							1	80
81	Toronto, Hamilton and Buffalo	8	11	4	22		9	3	3					3		18	81

TABLE 12.—SUMMARY of Equipment for the Year ended June 30, 1909—*Continued.*

Number.	Name of Railway.	Locomotives.					Cars in Passenger Service.										Number.
		Passenger.	Freight.	Switching.	Total.	Leased.	First-class.	Second-class	Combination.	Emigrant.	Dining	Parlour.	Sleeping.	Baggage, express and postal.	Other cars in passenger service.	Total.	
82	Vancouver, Victoria and Eastern	1	2	.....	3	.....	43	.....	.....	.....	...	.....	.....	.....	.....	43	82
83	Victoria and Sidney, B. C.	...	2	.....	2	.....	2	....	1	.....	.....	.....	...	.....	.....	3	83
84	Victoria Terminal Railway and Ferry Co.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
85	Wabash Railway Co. (in Canada)	11	53	3	67	.....	.....	.....	16	.....	2	13	.....	3	....	34	85
86	Wellington Colliery Co.	..	.....	6	6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	86
87	York and Carleton	1	.....	.....	1	...	1	.....	.....	.....	.....	.....	.....	1	.....	2	87
		1,056	2,539	374	3,969	65	1,560	471	429	317	127	60	261	926	41	4,192	

TABLE 12.—SUMMARY of Equipment for the Year ending June 30, 1909—*Continued.*

Number.	Name of Railway.	Cars in Freight Service.								Cars in Company's Service.						Total cars in Service.	Cars leased	Number.
		Box.	Flat.	Stock.	Coal.	Tank.	Refrigerator.	Other cars in freight service.	Total.	Officers' and pay.	Gravel.	Derrick.	Caboose.	Other Road.	Total.			
1	Alberta Railway and Irrigation Co.	4	11		50				65	2			3	4	9	79		1
2	Algoma Central and Hudson Bay	32	387		27			235	681	1	2		11	110	124	812		2
3	Atlantic and Lake Superior	4						10	14					5	5	23		3
4	Atlantic, Quebec and Western										10			12	22	27		4
5	Bay of Quinte	18	126						144		20		2	3	25	180		5
6	Bedlington and Nelson							1	1							2		6
7	Bessemer and Barry's Bay		1					6	7							7		7
8	Brandon, Saskatchewan and Hudson Bay							177	177							180		8
9	British Yukon	97	76	33	12		4		222	1		1	8	3	13	250		9
10	Brockville, Westport and Northwestern	8	6	2	4				20					1	1	31		10
11	Canada Southern	1,437	181	38	40	35			1,731			3	75	112	190	2,015		11
	Canadian Government Railways—																	
12	Intercolonial	6,990	3,044	145	1,683	40	143	50	12,095	8	200		119	23	350	12,887		12
13	P. E. Island	313	147	21	22		3	4	510	2				19	21	586		13
14	Canadian Northern	6,317	1,162	289	522		68		8,358	10	4	14	106	356	490	9,048	7,989	14
15	Canadian Northern, Ontario	149	327	15	60		3	50	604		3	3	10	4	20	658	648	15
16	Canadian Northern, Quebec	509	151	31	42		5		738	2	70	1	15	19	107	888	409	16
17	Canadian Pacific	33,542	6,949	2,715	2,519	4	1,055	964	47,748	39	1,546	49	797	1,421	3,852	53,354		17
18	Cape Breton		10						10							14		18
19	Caraquet	5	25						30							33		19
20	Carillon and Grenville		2					1	3							8		20
21	Central Ontario	53	181	11	10				255	1			3		4	271		21
22	Crowsnest Southern							312	312							314		22
23	Cumberland Railway and Coal Co	2	33		485				520			1	1	1	3	530		23
24	Dominion Atlantic	212	219	12	26				469				3	7	10	530		24
25	Elgin and Havelock		6	1					7							9		25
26	Eastern British Columbia	10	10						20				1		1	24		26
27	Grand Trunk	17,063	4,861	1,768	3,411	116	949		28,168	13	691	31	424	837	1,996	31,043		27
28	Grand Trunk—Canada Atlantic	1,800	344	57	84		25		2,310	1	3	1	15	91	111	2,460		28
29	Halifax and South Western	74	227	2	7	1	2		313			1	4	18	23	369		29
30	Hampton and St. Martin's	1	6						7							9		30
31	Hereford	60	10						70					2	2	75		31

TABLE 12.—SUMMARY of Equipment for the Year ending June 30, 1909—*Concluded.*

Number.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	Number.
	Name of Railway.	Cars in Freight Service.								Cars in Company's Service.						Total cars in service.	Cars leased	
		Box.	Flat.	Stock.	Coal.	Tank.	Refrigerator.	Other cars in freight service.	Total.	Officers' and pay.	Gravel.	Derrick.	Caboose.	Other road.	Total.			
32	Inverness Railway and Coal Co	8	29		148				185				3	5	8	197		32
33	Irondale, Bancroft and Ottawa	2	6						8		24			1	25	35	1	33
34	Kaslo and Slocan	26	2					14	42				1	5	6	51		34
35	Kent Northern	1	1						2							3		35
36	Kettle River Valley																	36
37	Kingston and Pembroke	7	43					2	52	1		1	1		3	67		37
38	Klondike Mines	7	16						23							25		38
39	Liverpool and Milton	1	12						13							14		39
40	London and Port Stanley	30	3	3	45				81				2	1	3	87		40
41	Lotbinière and Megantic	2	24						26				1		1	29		41
42	Manitoulin and North Shore	1	88						89				1	2	3	94	94	42
43	Maritime Coal Railway and Power Co		2						2		6			2	8	13		43
44	Massawippi Valley	350	150						500				3	3	6	519		44
45	Midland Railway of Manitoba							92	92							97		45
46	Moncton and Buctouche	4	38						42							45		46
47	Montreal and Atlantic	274	212	38		1			525				12	96	108	655		47
48	Montreal and Province Line	46	23		4				73				1	3	4	80		48
49	Montreal and Vermont Junction	273	136	4	24		4	1	442			2	7	17	26	486		49
50	Morrissey, Fernie and Michel	3			50				53				1	1	2	59		50
51	Napierville Junction Railway																	51
52	Nelson and Fort Sheppard							21	21							24		52
53	New Brunswick Coal and Railway Co	6	53		10				69				1	1	2	74		53
54	New Brunswick and P. E. Island	4	41						45							48		54
55	New Brunswick Southern	6	34	4					44							47		55
56	New Westminster Southern							37	37							57		56
57	North Shore	1	1		3				5					1	1	7		57
58	Nosbonsing and Nipissing		58						58					1	1	59		58
59	Nova Scotia Steel and Coal Co	2	15		26				43							44		59
60	Orford Mountain	1	11						12					1	1	16		60
61	Ottawa and New York	3	14						17		5		2	1	8	29	29	61
62	Père Marquette (in Canada)	1,333	134	35	615		11		2,128			1	23	16	40	2,196		62
63	Phillipsburg Railway and Quarry Co		1						1							2		63

64	Princeton Branch of Washington Co. Rly.	25	10	...	.....	.....	.....	.. ..	35	.....	.....	.. ..	.....	.....	37	.....	64
65	Quebec Central	308	325	74	.....	.....	6	.....	713	2	.....	1	7	.....	10	757	.....	65
66	Quebec and Lake St. John	461	190	20	87	....	5	.....	763	1	15	1	11	25	53	850	5	66
67	Quebec Railway, Light and Power Co	17	79	.....	14	.....	.....	.....	110	..	.....	...	.....	.....	.....	132	1	67
68	Quebec, Montreal and Southern	1,396	48	90	.....	.	10	.....	1,544	....	.....	1	4	14	19	1,576	.....	68
69	Red Mountain	.....	.....	...	.....	.....	.....	21	21	.....	. .	....	.....	.....	.....	23	.....	69
70	Rutland and Noyan	50	5	2	2	.....	.....	.....	59	.....	.....	.....	1	.....	1	64	64	70
71	Salisbury and Harvey	3	29	1	.....	.....	.....	.....	33	.....	... ..	.....	1	.....	1	35	. ...	71
72	Schomberg and Aurora	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72
73	Stanstead, Shefford and Chambly	105	53	1	9	....	1	.....	169	....	.....	.....	3	6	9	185	.....	73
74	St. Clair Tunnel	.....	.....	.....	. ..	.....	....	.. ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	74
75	St. Lawrence and Adirondack	75	30	....	...	.....	.....	.....	105	.....	. .	1	3	4	8	120	105	75
76	Sydney and Louisburg (Dom. Coal Co.)	16	66	.....	1,414	.....	....	...	1,496	.....	. ..	1	8	1	10	1,512	.....	76
77	Spokane and British Columbia Railway	5	13	....	.....	.....	.....	8	26	...	....	....	.....	.....	.....	28	.....	77
78	Temiscouata	73	57	.....	.....	.....	.....	.....	130	1	.....	.....	2	5	8	146	.....	78
79	Temiskaming and Northern Ontario	100	489	10	...	.....	.....	.....	599	2	.....	2	13	21	38	685	.....	79
80	Thousand Islands	.....	1	.....	.....	.....	.....	... .	1	.....	.....	.....	.....	.....	.....	2	.....	80
81	Toronto, Hamilton and Buffalo	186	89	10	.....	.....	.....	.....	285	1	.....	.....	9	4	14	317	.....	81
82	Vancouver, Victoria and Eastern	.....	.....	.....	.....	.....	.....	206	206	.....	.....	.....	.....	.....	.....	249	.... .	82
83	Victoria and Sydney, B.C.	2	15	.....	.....	.....	.....	.....	17	.....	.....	.....	1	.... .	1	21	.....	83
84	Victoria Terminal and Ferry Co.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
85	Wabash Railway Co. (in Canada)	559	22	86	94	.....	172	.....	933	.....	.....	1	31	11	43	1,010	.....	85
86	Wellington Colliery Co	5	14	.....	172	.....	.....	.....	191	.....	9	. ...	.....	.....	9	201	.....	86
87	York and Carleton	.....	4	.....	. ...	. .	.....	.....	4	... ..	.....	.....	.....	.....	.....	6	.....	87
	Total	74,477	21,188	5,518	11,721	197	2,466	2,212	117,779	88	2,608	117	1,750	3,296	7,859	129,830	9,345	

TABLE 13.—SUMMARY of Cars in Freight Service for the Year

Number.	NAME OF RAILWAY.	BOX CARS.		FLAT CARS.		STOCK CARS.	
		Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.
			Tons.		Tons.		Tons.
1	Alberta Railway and Irrigation Co	4	80	11	220		
2	Algoma Central and Hudson Bay	32	1,090	387	13,725		
3	Atlantic and Lake Superior	4	60				
4	Atlantic, Quebec and Western	1	30	10	300		
5	Bay of Quinte	18	370	126	2,820		
6	Bedlington and Nelson						
7	Bessemer and Barry's Bay			1	15		
8	Brandon, Saskatchewan and Hudson Bay						
9	British Yukon	97	1,868	76	1,448	33	640
10	Brockville, Westport and Northwestern	8	200	6	120	2	40
11	Canada Southern	1,437	49,130	181	4,200	38	760
12	Canadian Govt. Ry.—Intercolonial	6,990	200,665	3,044	76,560	145	3,385
13	" " Prince Edward Island	313	3,130	147	1,470	21	210
14	Canadian Northern	6,317	189,510	1,162	34,050	289	8,470
15	Canadian Northern, Ontario	149	4,470	327	9,810	15	450
16	Canadian Northern, Quebec	509	15,140	151	4,205	31	615
17	Canadian Pacific	33,542	974,560	6,949	214,400	2,758	77,725
18	Cape Breton			10	1,500		
19	Caraquet	5	75	25	375		
20	Carillon and Grenville						
21	Central Ontario	53	1,270	181	4,620	11	320
22	Crowsnest Southern						
23	Cumberland Railway and Coal Co	2	40	33	430		
24	Dominion Atlantic	212	4,655	219	5,200	12	240
25	Elgin and Havelock			6	60	1	10
26	Eastern British Columbia	10	400	10	400		
27	Grand Trunk	17,063	463,785	4,861	121,875	1,768	45,750
28	Grand Trunk (Canada Atlantic)	1,800	49,280	344	9,010	57	1,500
29	Halifax and Southwestern	74	2,030	227	5,850	2	40
30	Hampton and St. Martins	1	20	6	120		
31	Hereford	60	1,800	10	200		
32	Inverness Railway and Coal Co	8	160	29	870		
33	Irondale, Bancroft and Ottawa	2	40	30	600		
34	Kaslo and Slocan	26	520	2	40		
35	Kent Northern	1	12	1	12		
36	Kettle River Valley						
37	Kingston and Pembroke	7	140	43	860		
38	Klondike Mines	7	105	16	340		
39	Liverpool and Milton	1	15	12	200		
40	London and Port Stanley	30	810	3	75	3	90
41	Lotbinière and Megantic	2	45	24	720		
42	Manitoulin and North Shore	1	40	88	3,520		
43	Maritime Coal, Railway and Power Co			2	40		
44	Massawippi Valley	350	6,950	150	2,750		
45	Midland Railway of Manitoba						
46	Moncton and Bouctouche	5	100	38	630		
47	Montreal and Atlantic	274	5,750	212	6,045	38	975
48	Montreal and Province Line	46	820	23	395		
49	Montreal and Vermont Junction	273	8,190	136	4,080	4	120
50	Morrissey, Fernie and Michel	3	100				
51	Napierville Junction Railway						
52	Nelson and Fort Sheppard						
53	New Brunswick Coal and Railway Co	6	160	53	1,330		
54	New Brunswick and P.E. Island	4	70	41	615		
55	New Brunswick Southern	6	120	34	680	4	80
56	New Westminster Southern						
57	North Shore	1	30	1	30		
58	Nosbonsing and Nipissing			58	580		
59	Nova Scotia Steel and Coal Co	2	20	15	150		
60	Orford Mountain	1	20	11	220		

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ending June 30, 1909, showing Number and Aggregate Capacity.

Coal Cars.		Tank Cars.		Refrigerator Cars.		Other Cars.		Total.		
Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.
	Tons.		Tons.		Tons.		Tons.		Tons.	
50	1,000							65	1,300	1
27	830					235	11,020	681	26,665	2
						10	150	14	210	3
						11	415	22	745	4
								144	3,190	5
						1	20	1	20	6
						6	40	7	55	7
						177	3,540	177	3,540	8
12	240			4	80			222	4,296	9
4	80							20	440	10
40	930	35	710					1,731	55,730	11
1,683	26,061	40	1,000	143	3,950	50	1,500	12,095	313,121	12
22	330			3	30	4	40	510	5,210	13
522	21,280			68	2,040			8,358	255,350	14
60	3,000			3	90	50	2,000	604	19,820	15
42	1,075			4	80	70	2,800	807	23,915	16
2,519	110,820	4	80	1,055	29,420	921	28,525	47,748	1,435,530	17
								10	1,500	18
								30	450	19
										20
10	400							255	6,610	21
						312	6,240	312	6,240	22
485	5,805							520	6,275	23
26	530					7	120	476	10,745	24
								7	70	25
								20	800	26
3,411	137,800	116	2,162	949	28,370			28,168	802,742	27
84	3,010			25	750			2,310	63,550	28
7	70	1	30	2	60			313	8,080	29
								7	140	30
								70	2,000	31
148	4,440							185	5,470	32
								32	640	33
						14	280	42	840	34
								2	24	35
										36
						2	40	52	1,040	37
								23	445	38
								13	215	39
45	1,290							81	2,265	40
						1	15	27	780	41
								89	3,560	42
						6	120	8	160	43
								500	9,700	44
						92	1,840	92	1,840	45
								43	730	46
		1	30					525	12,800	47
4	60							73	1,275	48
24	720			4	120	1	30	442	13,260	49
50	1,510							53	1,610	50
										51
						21	420	21	420	52
10	250							69	1,740	53
								45	685	54
								44	880	55
						37	740	37	740	56
3	75							5	135	57
						1	10	59	590	58
26	260							43	430	59
								12	240	60

TABLE 13—SUMMARY of Cars in Freight Service for the

Number.	Name of Railway.	Box Cars.		Flat Cars.		Stock Cars.	
		Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.
			Tons.		Tons.		Tons.
61	Ottawa and New York	3	60	14	280		
62	Père Marquette—(in Canada)	1,333	43,630	134	3,680	35	1,030
63	Philipsburg Railway and Quarry Co			1	10		
64	Princeton Branch of Washington Co. Railway	25	750	10	300		
65	Quebec Central	308	7,915	325	7,260	74	1,965
66	Quebec and Lake St. John	461	13,930	190	4,415	20	480
67	Quebec Railway Light and Power Co.	17	340	79	1,580		
68	Quebec, Montreal and Southern	1,396	41,880	48	1,180	90	2,700
69	Red Mountain						
70	Rutland and Noyan	50	1,500	5	150	2	40
71	Salisbury and Harvey	3	30	29	435	1	10
72	Schomberg and Aurora						
73	Stanstead, Shefford and Chambly	105	2,000	53	860	1	15
74	St. Clair Tunnel						
75	St. Lawrence and Adirondack	75	1,125	30	450		
76	Sydney and Louisburg (Dominion Coal Co.)	16	320	66	1,020		
77	Spokane and British Columbia Railway	5	150	13	390		
78	Temiscouata	73	1,810	57	1,240		
79	Temiskaming and Northern Ontario	100	3,500	489	16,670	10	300
80	Thousand Islands			1	20		
81	Toronto, Hamilton and Buffalo	186	5,580	89	2,470	10	300
82	Vancouver, Victoria and Eastern						
83	Victoria and Sydney B.C	2	40	15	300		
84	Victoria Terminal and Ferry Co						
85	Wabash Railway Co. (in Canada)	559	17,640	22	750	86	2,520
86	Wellington Colliery Co	5	70	14	190		
87	York and Carleton			4	40		
	Total	74,479	2,130,145	21,220	584,455	5,561	150,800

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Year ending June 30, 1909, showing Number and Aggregate Capacity—*Concluded.*

Coal Cars.		Tank Cars.		Refrigerator Cars.		Other Cars.		Total.		
Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.
	Tons.		Tons.		Tons.		Tons.		Tons.	
								17	340	61
615	21,495				11	325		2,128	70,160	62
								1	10	63
								35	1,050	64
				6	180			713	17,320	65
87	2,300			5	110			763	21,235	66
14	280							110	2,200	67
				10	300			1,544	46,060	68
						21	420	21	420	69
2	80							59	1,770	70
								33	475	71
										72
9	135			1	20			169	3,030	73
										74
								105	1,575	75
1,414	25,735							1,496	27,075	76
						8	300	26	840	77
								130	3,050	78
								599	20,470	79
								1	20	80
								285	8,350	81
						206	4,120	206	4,120	82
								17	340	83
										84
94	3,720			172	5,160			933	29,790	85
172	4,370					9	90	200	4,720	86
								4	40	87
11,721	379,981	197	4,012	2,465	71,085	2,273	64,835	117,916	3,385,313	

TABLE 14.—SUMMARY of Bridges, Trestles and Tunnels for the Year ending June 30, 1909.

Number.	1	2	3	4	5	6	7	8	9	10	11	12	13
	NAME OF RAILWAY.	BRIDGES.											
		STONE.				IRON.				WOODEN.			
		No.	Aggregate Length.	Minimum Length.	Maximum Length.	No.	Aggregate Length.	Minimum Length.	Maximum Length.	No.	Aggregate Length.	Minimum Length.	Maximum Length.
			Ft. In.	Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.
1	Alberta Railway and Irrigation Co									4	615 0	80 0	300 0
2	Algoma Central and Hudson Bay					2	473 0	290 0	423 0				
3	Atlantic and Lake Superior					5	1,277 0						
4	*Atlantic, Quebec and Western					4	795 0	55 0	500 0				
5	Bay of Quinté					12	1,010 0	24 0	200 0	1	60 0		
6	Bedlington and Nelson									1	75 0		
7	Bessemer and Barry's Bay									1	125 0	125 0	125 0
8	Brandon, Saskatchewan and Hudson Bay												
9	Brandon Transfer									1	252 0		
10	British Yukon												
11	Brockville, Westport and Northwestern					1	69 0	69 0	69 0	31	306 0	3 0	65 0
12	Bruce Mines and Algoma												
13	Canada Southern	32	645 9	8 0	93 0	48	6,177 5	11 0	1,735 0	2	117 6	9 6	108 0
	Canadian Government Railways—												
14	Intercolonial					397	37,106 0	10 0	1,785 6	94	4,583 2	12 0	497 0
15	Prince Edward Island					44	4,858 0	12 0	2,520 0	14	252 0	12 0	30 0
16	Canadian Northern					13	11,109 0	350 0	1,867 0	36	4,176 0	30 0	384 0
17	Canadian Northern Ontario					20	2,314 0	20 0	223 0				
18	Canadian Northern Quebec	+270	41,681 0	13 0	1,159 0	20	5,251 0	20 0	1,416 0				
19	Canadian Pacific	59	3,629 0	10 0	176 0	609	82,016 0	10 0	3,654 0	849	24,155 0	3 0	2,239 0
20	Cape Breton												
21	Caraquet									9	1,775 0	50 0	400 0
22	Carillon and Grenville									1			
23	Central Ontario					11	1,134 0	34 0	490 0	1	45 0	45 0	
24	Crowsnest Southern									8	2,254 0	44 0	450 0
25	Cumberland Railway and Coal Co					3	30 0		30 0	1	25 0		25 0
26	Dominion Atlantic					17	4,075 0	29 0	1,207 0	7	2,263 0	40 0	586 0
27	Elgin and Havelock									3	150 0	50 0	50 0

28	Grand Trunk (in Canada)	136	8,251	0	10	0	300	0	842	94,185	0	10	0	6,594	0	412	19,733	0	10	0	560	0
29	Grand Trunk (Canada Atlantic)								74	10,519	0	12	0	2,180	0	46	2,958	0	12	0	373	0
30	Halifax and Southwestern	1	50	0	50	0	50	0	61	5,516	3	17	0	403	0	77	1,288	0	9	0	56	0
31	Hampton and St. Martin's																					
32	Hereford								6	292	0	23	0	71	0	4	637	0	40	0	318	0
33	Inverness Railway and Coal Co								9	525	0	20	0	120	0	5	52	0	8	0	14	0
34	Irondale, Bancroft and Ottawa								1	90	0					16	575	0				
35	Kaslo and Slocan															14	2,330	0	6	0	330	0
36	Kent Northern	1	30	0	30		30	0														
37	Kettle River Valley															2	1,450	0	500	0	950	0
38	Kingston and Pembroke								10	448	0	24	0	105	0	77	731	0	4	0	47	0
39	Klondike Mines								2	486	11	80	0	406	11							
40	Liverpool and Milton															1	200	0				
41	Lotbinière and Megantic								1	34	0	34	0	34	0							
42	London and Port Stanley								6	1,751	0	55	0	596	0							
43	Maritime Railway, Coal and Power Co.															2	310	0	110	0	200	0
44	Maganetawan River																					
45	Manitoulin and North Shore															3	304	3	51	3	183	0
46	Massawippi Valley	1	12	0												10	382	0	10	0	141	0
47	Midland of Manitoba															1	419	0				
48	Moncton and Buctouche															5	899	0				
49	Montreal and Atlantic								23	2,057	1	23	8	314	10	3	745	4	125	7	387	9
50	Montreal and Vermont Junction								1	289	0	289	0	289	0	1	25	0	25	0	25	0
51	Montreal and Province Line								1	94	0	94	0	94	0	14	999	0	8	0	724	0
52	Morrissey, Fernie and Michel															1	900	0	900	0	900	0
53	Napierville Junction								8	255	6	13	0	55	0							
54	Nelson and Fort Sheppard								1	500	0					1	80	0				
55	New Brunswick Coal and Railway Co.								2	320	0	100	0	220	0	6	793	0	17	0	150	0
56	New Brunswick and P. E. Island															7	1,035	0	52	0	350	0
57	New Brunswick Southern								12	866	0	29	11	208	0	50	1,100	0	70	0	246	0
58	New Westminster Southern																					
59	North Shore																					
60	Nosbonsing and Nipissing																					
61	Nova Scotia Steel and Coal Co.																					
62	Orford Mountain															21	687	6	10	0	78	6
63	Ottawa and New York								5	2,606	0	40	0	2,236	0							
64	Père Marquette, (in Canada)								5	1,556	0	45	0	1,215	0							
65	Philipsburg Railway and Quarry Co.																					
66	Princeton Branch, of Washington Co., Ry.								2	721	0	253	0	468	0							
67	Quebec Central								47	3,420	0	15	0	646	0							
68	Quebec and Lake St. John								28	3,727	0	24	0	220	0							
69	Quebec Railway, Light and Power Co.								14	1,230	0	13	0	300	0							
70	Quebec, Montreal and Southern								17	4,745	0	240	0	965	0							
71	Red Mountain																					
72	Rutland and Noyan																					
73	Salisbury and Harvey								1							13						
74	Schomberg and Aurora																					
75	Stanstead, Shefford and Chambly								1	112	0	112	0	112	0	6	561	0	12	0	334	0
76	St. Clair Tunnel																					

*Under construction. †Steel.

TABLE 14.—SUMMARY of Bridges, Trestles and Tunnels for the Year ending June 30, 1909—*Continued.*

Number.	1	2	3	4	5	6	7	8	9	10	11	12	13
	NAME OF RAILWAY.	BRIDGES.											
		STONE.				IRON.				WOODEN.			
		No.	Aggregate length.	Minimum length.	Maximum length.	No.	Aggregate length.	Minimum length.	Maximum length.	No.	Aggregate length.	Minimum length.	Maximum length.
			Ft. In.	Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.
77	St. Lawrence and Adirondack					10	1,322 0	18 0	598 0				
78	Sydney and Louisburg (Dom. Coal Co.)					*11	567 0	12 0	330 0	1	13 0		
79	Temiscouata					2	504 6	212 6	292 0				
80	Temiskaming and Northern Ontario					*15	3,300 0	30 0	800 0				
81	Thousand Islands					5	795 0	103 0	250 0				
82	Toronto, Hamilton and Buffalo					12	1,587 6	13 6	480 0				
83	Vancouver, Victoria and Eastern									10	1,892 0	190 0	415 0
84	Vancouver Copper Co												
85	Victoria and Sidney												
86	Victoria Terminal Railway and Ferry Co												
87	Wabash Railway (in Canada												
88	Wellington Colliery Co									2	144 0		
89	York and Carleton												
	Total	500				2,441				1,875			

*Steel.

TABLE 14.—SUMMARY of Bridges, Trestles and Tunnels for the Year ending June 30, 1909—*Continued.*

Number.	14	15	16	17	18	19	20	21	22	23	24	25	26
	NAME OF RAILWAY.	BRIDGES.								TRESTLES.			
		COMBINATION.				TOTAL.				—			
		No.	Aggregate length.	Minimum length.	Maximum length.	No.	Aggregate length.	Minimum length.	Maximum length.	No.	Aggregate length.	Minimum length.	Maximum length.
			Ft. In.	Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.
1	Alberta Railway and Irrigation Co					4	615 0	80 0	300 0	4	3,420 0	90 0	1,515 0
2	Algoma Central and Hudson Bay	2	991 0	481 0	510 0	4	1,464 0	290 0	510 0	45	12,191 0	56 0	1,624 0
3	Atlantic and Lake Superior	2	950 0			7	2,227 0			9	1,346 0		
4	Atlantic, Quebec and Western					4	795 0	55 0	500 0	2	721 0	285 0	436 0
5	Bay of Quinté					13	1,070 0	24 0	200 0				
6	Bedlington and Nelson					1	75 0			12	3,407 0	65 0	767 0
7	Bessemer and Barry's Bay					1	125 0	125 0	125 0				
8	Brandon, Saskatchewan and Hudson Bay					1	252 0			28	3,183 0	58 0	418 0
9	*Brandon Transfer												
10	British Yukon	1	150 0			1	150 0			30	2,922 0	16 0	702 0
11	Brockville, Westport and Northwestern	19	179 0	6 0	12 0	51	554 0			2	1,275 0	575 0	700 0
12	Bruce Mines and Algoma												
13	Canada Southern					82	6,940 8			34	2,191 6	9 0	265 6
14	Canadian Government Railways—												
15	Intercolonial					491	41,689 2	10 0	1,785 6	22	9,669 0	41 0	2,964 0
16	Prince Edward Island					58	5,111 0	12 0	2,520 0				
17	Canadian Northern					49	15,285 0	30 0	1,867 0	1,489	156,397 0	8 0	3,750 0
18	Canadian Northern, Ontario	2	49 0	22 0	27 0	22	2,363 0			81	9,883 0	15 0	675 0
19	Canadian Northern, Quebec	11	8,460 0	16 0	3,485 0	31	13,711 0	16 0	3,458 0	34	4,137 0	12 0	450 0
20	Canadian Pacific	124	9,761 0	5 0	1,158 0	1,911	161,242 0	5 0	3,654 0	1,839	215,926 0	5 0	9,075 0
21	Cape Breton	4	309 0	33 0	370 0	4	309 0	33 0	370 0				
22	Caraquet					9	1,775 0	50 0	400 0				
23	Carillon and Grenville					1							
24	Central Ontario					12	1,179 0	34 0	490 0				
25	Crowsnest Southern					8	2,254 0	44 0	450 0	32	9,212 0	14 0	1,702 0
26	Cumberland Railway and Coal Co					4	55 0						
27	Dominion Atlantic					24	6,337 0	29 0	1,207 0	29	8,418 0	28 0	350 0
28	Eastern British Columbia									6	552 0	52 0	109 0

TABLE 14.—SUMMARY of Bridges, Trestles and Tunnels for the Year ending June 30, 1909.—*Continued.*

Number.	Name of Railway.	BRIDGES.								TRESTLES.			
		Combination.				Total.				—			
		No.	Aggregate Length.	Minimum Length.	Maximum Length.	No.	Aggregate Length.	Minimum Length.	Maximum Length.	No.	Aggregate Length.	Minimum Length.	Maximum Length.
			Ft. In.	Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.
29	Elgin and Havelock					3	150 0	50 0	50 0	6	1,060 0	30 0	400 0
30	Grand Trunk in Canada	90	7,616 0	11 0	539 0	1,480	129,785 0	10 0	6,594 0	25	2,159 0	24 0	525 0
31	" " (Canada Atlantic)	6	2,342 0	100 0	1,053 0	126	15,819 0	12 0	2,180 0	29	5,514 0	16 0	627 0
32	Halifax and Southwestern					139	6,854 3			39	6,245 0	13 0	804 0
33	Hampton and St. Martins												
34	Hereford					10	929 0			2	478 0	119 0	359 0
35	Inverness Railway and Coal Co.					14	577 0	8 0	120 2	14	2,139 0	48 0	420 0
36	Irondale, Bancroft and Ottawa					17	665 0						
37	Kaslo and Slocan					14	2,330 0	6 0	330 0				
38	Kent Northern					1	30 0	30 0	30 0				
39	Kettle River Valley					2	1,450 0	500 0	950 0				
40	Kingston and Pembroke					87	1,179 0						
41	Klondike Mines					2	486 11	80 0	406 11	15	2,965 6	32 0	125 0
42	Liverpool and Milton					1	200 0			2	200 0	100 0	100 0
43	London and Port Stanley					6	1,751 0	55 0	596 0				
44	Lotbinière and Megantic					1	34 0	34 0	34 0	1	600 0		
45	Maganetawan River												
46	Maritime Railway and Power Co.					2	310 0	110 0	200 0				
47	Manitoulin and North Shore	11	2,223 00	26 00	403 00	14	2,527 3						
48	Massawippi Valley					11	394 0	10 0	141 0	7	873 0	40 0	222 0
49	Midland of Manitoba					1	419 0			64	6,870 0	28 0	592 0
50	Moncton and Buctouche					5	899 0			5	2,290 0		
50	Montreal and Atlantic					26	2,802 5			458	8,532 0		
51	Montreal and Province Line					15	1,093 0	8 0	724 0	24	1,049 0	8 0	117 0
52	Montreal and Vermont Junction					2	314 0	25 0	289 0	5	112 0	18 8	
53	Morrissey, Fernie and Michel					1	900 0	900 0	900 0	4	995 0	20 0	500 0
54	Napierville Junction					8	255 6	13 0	55 0				
55	Nelson and Fort Sheppard					2	580 0			41	5,263 0	14 0	512 0

56	New Brunswick Coal and Railway Co.					8	1,113 0	17 0	220 0	21	4,567 0	40 0	500 0
57	New Brunswick and P. E. Island					7	1,035 0	52 0	350 0				
58	New Brunswick Southern					62	1,966 0	29 11	208 0	10	732 0	28 0	220 0
59	New Westminster Southern												
60	North Shore												
61	Nosbonsing and Nipissing												
62	Nova Scotia Steel and Coal Co												
63	Orford Mountain					21	687 6	10 0	78 6	2	274 0	78 0	196 0
64	Ottawa and New York					5	2,606 0	40 0	2,236 0	16	1,187 0	30 0	107 0
65	Père Marquette, in Canada					5	1,556 0	45 0	1,215 0	82	1,047 0	8 0	245 0
66	Philipsburg Railway and Quarry Co.												
67	Princeton Branch, Washington Co. Ry					2	721 0	253 0	468 0	1	48 0	48 0	48 0
68	Quebec Central					47	3,420 0	15 0	646 0				
69	Quebec and Lake St. John					28	3,727 0	24 0	220 0	17	1,139 0	20 0	260 0
70	Quebec Railway, Light and Power Co.					14	1,230 0	13 0	300 0	1	50 0		
71	Quebec, Montreal and Southern					17	4,745 0	240 0	965 0	23	3,890 0	22 0	1,001 0
72	Red Mountain									8	1,511 0	14 0	432 0
73	Rutland and Noyan												
74	Salisbury and Harvey					14							
75	Schomberg and Aurora												
76	Stanstead, Shefford and Chambly					7	673 0	12 0	334 0	21	2,165 0	11 0	152 6
77	St. Clair Tunnel												
78	St. Lawrence and Adirondack					10	1,322 0	18 0	598 0				
79	Sydney and Louisburg					12	580 0	12 0	330 0	13	2,187 0	24 0	580 0
80	Temiscouata	11	2,041 0	112 0	477 0	13	2,515 6	112 0	477 0	35	4,556 0	28 0	562 0
81	Temiskaming and Northern Ontario					15	3,300 0	30 0	800 0	30	8,101 0	54 0	75 6
82	Thousand Islands					5	795 0	103 0	250 0				
83	Toronto, Hamilton and Buffalo	2	151 10	40 0	111 10	14	1,739 0	13 6	480 0	31	995 2	8 0	173 0
84	Vancouver, Victoria and Eastern					10	1,892 0	190 0	415 0	116	43,753 0	7 0	4,255 0
85	Vancouver Copper Co												
86	Victoria and Sidney									6	935 0	22 0	520 0
87	Victoria Terminal Railway and Ferry Co.												
88	Wabash (in Canada)												
89	Wellington Colliery Co	1	56 0			3	200 0						
90	York and Carleton												
	Total	286				5,102				4,872			

TABLE 14.—Summary of Bridges, Trestles and Tunnels for the Year ending June 30, 1909.—*Continued.*

Number.	Name of Railway.	Level Crossings.			Overhead Highway Crossings.							
					Bridges.		Conduits.		Trestles.		Total.	
		No.	Guarded.	Unguarded.	No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.
						Feet In.		Feet In.		Feet In.		Feet In.
1	Alberta Railway and Irrigation Co	32		32								
2	Algoma Central and Hudson Bay	12	2	10								
3	Atlantic and Lake Superior	61		61	3	21 0					3	21 0
4	Atlantic, Quebec and Western	16		16								
5	Bay of Quinté	73		73	3						3	
6	Bedlington and Nelson	3		3								
7	Bessemer and Barry's Bay	2		2								
8	Brandon, Saskatchewan and Hudson Bay	80		80								
9	Brandon Transfer											
10	British Yukon											
11	Brockville, Westport and Northwestern	35		35								
12	Bruce Mines and Algoma											
13	Canada Southern	440	28	412	1	22 0			16	21 2	17	21 2
	Canadian Government Railways:—											
14	Intercolonial	874	96	778	33	18 9					33	18 9
15	Prince Edward Island	1,018		1,018	2	16 6					2	16 6
16	Canadian Northern	2,582	6	2,576								
17	Canadian Northern Ontario	153	14	139	1	21 0			5	22 6	6	21 0
18	Canadian Northern Quebec	209	6	203								
19	Canadian Pacific	4,327	199	4,128	53	15 8			17	19 0	70	15 8
20	Cape Breton	16		16								
21	Caraquet	64		64								
22	Carillon and Grenville	9	1	8	1	16 0					1	16 0
23	Central Ontario	116		116								
24	Crowsnest Southern	18	1	17								
25	Cumberland Railway and Coal Co	19	2	17								

26	Dominion Atlantic	181	2	179	5	22	0						5	22	0
27	Elgin and Havelock	12		12											
28	Grand Trunk (in Canada)	3,612	476	3,136	48	16	6				174	16	6	222	16	6
29	" Canada Atlantic	311	25	286	5	20	6							5	20	6
30	Halifax and Southwestern	239	1	238							1	23	6	1	23	6
31	Hampton and St. Martins	21		21												
32	Hereford	30		30												
33	Inverness Railway and Coal Co	59		59												
34	Irondale, Bancroft and Ottawa	17		17												
35	Kaslo and Slocan	9		9												
36	Kent Northern	2		2												
37	Kettle River Valley	10		10												
38	Kingston and Pembroke	56		56	1	16	5							1	16	5
39	Klondike Mines	4		4												
40	London and Port Stanley	37	6	31												
41	Liverpool and Milton	2	1	1												
42	Lotbinière and Megantic	9		9												
43	Maganetawan River															
44	Maritime Coal and Railway Co	17		17												
45	Manitoulin and North Shore															
46	Massawippi Valley	29	3	26	1	17	2							1	17	2
47	Midland of Manitoba															
48	Moncton and Buctouche	21		21	1						1			2		
49	Montreal and Atlantic	186	6	180							1	18	10	1	18	10
50	Montreal and Province Line	48		48												
51	Montreal and Vermont Junction	28		28												
52	Morrissey, Fernie and Michel	4		1												
53	Napierville Junction	19	1	18												
54	Nelson and Fort Sheppard	5		5												
55	New Brunswick Coal and Railway Co	32		32												
56	New Brunswick and P. E. Island															
57	New Brunswick Southern	55		55												
58	New Westminster Southern	76		76												
59	North Shore	3		3												
60	Nosbonsing and Nipissing	2		2												
61	Nova Scotia Steel and Coal Co	27	23	4												
62	Orford Mountain	42		42												
63	Ottawa and New York	69		69							1	20	0	1	20	0
64	Père Marquette (in Canada)	232	10	222	1	20	0							1	20	0
65	Philipsburg Railway and Quarry Co															
66	Princeton Branch of Washington Co. Railway, (U.S.)															
67	Quebec Central	115		115												
68	Quebec and Lake St. John	68	6	62												
69	Quebec Railway, Light and Power Co	17		17												
70	Quebec, Montreal and Southern	128		128												
71	Red Mountain	7		7												
72	Rutland and Noyan	2		2												
73	Salisbury and Harvey	30		30												
74	Schomberg and Aurora	11		11												
75	Stanstead, Shefford and Chambly	53	2	51							1	18	0	1	18	0

TABLE 14.—SUMMARY of Bridges, Trestles and Tunnels for the Year ending June 30, 1909—*Continued.*

Number.	Name of Railway.	Level Crossings.			Overhead Highway Crossings.							
					Bridges.		Conduits.		Trestles.		Total.	
		No.	Guarded.	Unguarded.	No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.
			No.	No.		Ft. In.		Ft. In.		Ft. In.		Ft. In.
76	St. Clair Tunnel											
77	St. Lawrence and Adirondack	35	2	33					1	20 0	1	20 0
78	Sydney and Louisburg (Dom. Coal Co.)	43	1	42	2	17 4					2	17 4
79	Temiscouata	44		44	2	16 0					2	16 0
80	Temiskaming and Northern Ontario	42	2	40					1	26 0	1	26 0
81	Thousand Islands	20		20								
82	Toronto, Hamilton and Buffalo	178	29	149					7	21 6	7	21 6
83	Vancouver, Victoria and Eastern	133	3	130	2	22 0					2	22 0
84	Vancouver, Westminster and Yukon											
85	Vancouver Copper Co											
86	Victoria and Sidney	17		17								
87	Victoria Terminal Railway and Ferry Co	14		14								
88	Wabash Railway (in Canada)											
89	Wellington Colliery Co	5		5								
90	York and Carleton	11		11								
	Final total	16,638	954	15,684	165				226		391	

TABLE 14.—SUMMARY of Bridges, Trestles and Tunnels for the Year ending June 30, 1909—*Continued.*

Number.	Name of Railway.	Overhead Railway Crossings.								Tunnels.	
		Bridges.		Conduits.		Trestles.		Total.			
		No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.
			Ft. In.		Ft. In.		Ft. In.		Ft. In.		Ft. In.
1	Alberta Railway and Irrigation Company										
2	Algoma Central and Hudson Bay	1	16 2					1	16 2		
3	Atlantic and Lake Superior										
4	*Atlantic, Quebec and Western										
5	Bay of Quinté	2						2			
6	Bedlington and Nelson										
7	Bessemer and Barry's Bay										
8	Brandon, Saskatchewan and Hudson Bay										
9	*Brandon Transfer										
10	British Yukon										
11	Brockville, Westport and Northwestern	1	325 0					1	325 0		
12	Bruce Mines and Algoma										
13	Canada Southern	2	21 4					2	21 4		
14	Canadian Government Railways—Intercolonial	1	22 0					1	22 0	1	22 0
15	" " " Prince Edward Island										
16	Canadian Northern										
17	Canadian Northern Ontario	3	22 10					3	22 10		
18	Canadian Northern Quebec										
19	Canadian Pacific	35	14 6			4	22 6	39	14 6	53	17 6
20	Cape Breton										
21	Caraquet										
22	Carillon and Grenville										
23	Central Ontario	1	20 2					1	20 2	1	20 2
24	Crowsnest Southern									1	22 0
25	Cumberland Railway and Coal Co.										
26	Dominion Atlantic										

TABLE 14.—SUMMARY of Bridges, Trestles and Tunnels for the Year ending June 30, 1909—*Concluded.*

Number.	Name of Railway.	Overhead Railway Crossings.								Tunnels.	
		Bridges.		Conduits.		Trestles.		Total.			
		No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.
			Ft. In.		Ft. In.		Ft. In.		Ft. In.		Ft. In.
27	Elgin and Havelock										
28	Grand Trunk (in Canada)	102	16 4	1	21 3	2	21 3	105	16 4		
29	Grand Trunk (Canada Atlantic)	4	22 0					4	22 0		
30	Halifax and Southwestern										
31	Hampton and St. Martin's										
32	Hereford										
33	Inverness Railway and Coal Co	1	50 0					1	50 0		
34	Irondale, Bancroft and Ottawa										
35	Kaslo and Slocan										
36	Kent Northern										
37	Kettle River Valley										
38	Kingston and Pembroke										
39	Klondike Mines										
40	Liverpool and Milton										
41	Lotbinière and Megantic										
42	London and Port Stanley										
43	Maritime Railway and Coal Co										
44	Maganetawan River										
45	Manitoulin and North Shore										
46	Massawippi Valley	1						1			
47	Midland of Manitoba										
48	Moncton and Buctouche										
49	Montreal and Atlantic										
50	Montreal and Province Line										
51	Montreal and Vermont Junction										
52	Morrissey, Fernie and Michel										

53	Napierville Junction												
54	Nelson and Fort Sheppard												
55	New Brunswick Coal and Ry. Co.												
56	New Brunswick and P. E. Island												
57	New Brunswick Southern												
58	New Westminster Southern												
59	North Shore												
60	Nosbonsing and Nipissing												
61	Nova Scotia Steel and Coal Co												
62	Orford Mountain						1	46 5	1	46 5			
63	Ottawa and New York												
64	Père Marquette, in Canada												
65	Philipsburg Ry. and Quarry Co.												
66	Princeton Branch, of Washington Co. Ry												
67	Quebec Central	1	25 0						1	25 0			
68	Quebec and Lake St. John												
69	Quebec Ry., Light and Power Co												
70	Quebec, Montreal and Southern												
71	Red Mountain												
72	Rutland and Noyan												
73	Salisbury and Harvey												
74	Schomberg and Aurora												
75	Stanstead, Shefford and Chambly												
76	St. Clair Tunnel										1	16 1	
77	St. Lawrence and Adirondack												
78	Sydney and Louisburg	1	22 0						1	22 0			
79	Temiscouata												
80	Temiskaming and Northern Ontario												
81	Thousand Islands												
82	Toronto, Hamilton and Buffalo	2	18 9						2	18 9	1		
83	Vancouver, Victoria and Eastern										4	22 0	
84	Vancouver, Westminster and Yukon												
85	Vancouver Copper Co												
86	Victoria and Sidney, B.C.												
87	Victoria Terminal Ry. and Ferry Co												
88	Wabash Ry., in Canada												
89	Wellington Colliery Co.												
90	York and Carleton												
	Total	158		1		7		166			62		

TABLE 15A.—Summary of Accidents to Persons for the

A.—ACCIDENTS RESULTING FROM THE MOVEMENT

PASSEN

Number.	NAME OF RAILWAY.	KIND OF									
		COLLISIONS.		DERAILMENTS.		PARTING OF TRAINS.		LOCOMOTIVES OR CARS BREAKING DOWN.		FALLING FROM TRAINS, LOCOMOTIVES OR CARS.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
	172	173	174	175	176	177	178	179	180	181	182
1	Canada Southern										1
2	Canadian Government Railways—Intercolonial		13		16					1	3
3	Prince Edward Island										
4	Canadian Northern		2							1	1
5	Canadian Northern, Quebec									2	
6	Canadian Pacific	5	22	1	7					6	4
7	Grand Trunk (in Canada)	1	24		26						1
8	Grand Trunk (Canada Atlantic)										
9	Halifax and Southwestern				4						1
10	Kingston and Pembroke				2						
11	Manitoulin and North Shore		1								
12	Montreal and Province Line				1						
13	Nelson and Fort Sheppard									1	
14	New Westminster Southern				13						
15	Ottawa and New York										
16	Père Marquette										
17	Quebec and Lake St. John										
18	Stanstead, Shefford and Chambly				1						
19	Temiskaming and Northern Ontario				29						
20	Vancouver, Victoria and Eastern		8								
21	Wabash (in Canada)		13								
	Total	6	83	1	99					11	11

NOTE.—Postal Clerks. Pullman Employees, etc.—Injured, 25.

SESSIONAL PAPER No. 20b

Year ending June 30, 1909, showing kind of Accident.

OF TRAINS, LOCOMOTIVES OR CARS.

GERS.

183	184	185	186	187	188	189	190	191	192	193	194	

ACCIDENT.

Jumping on or off Trains, Locomotives or Cars.		Struck by Trains, Locomotives or Cars.						Other Causes.		Total Accidents to Passengers.		
		At Highway Crossings.		At Stations.		At other points along Track.						
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number.
.....	2	.....	.....	.....	.....	....	.....	.....	.....	.....	3	1
.....	9	.....	.....	.....	.....	.....	.....	.....	1	1	42	2
1	.....	.....	.....	....	.....	.....	.....	....	.....	1	.....	3
.....	2	.....	.....	.....	2	.....	1	.....	1	1	9	4
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	5
8	26	1	.....	.....	2	.....	.....	2	15	23	76	6
3	15	.....	.....	.....	.....	.....	.....	.....	4	4	70	7
.....	1	.....	.....	.....	.....	...	.....	.....	.....	.....	1	8
.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	7	9
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	11
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	12
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	13
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	14
.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	15
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	16
1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	1	17
.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	2	18
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29	19
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	15	21
14	57	1	.....	1	5	...	1	2	25	36	281	

TABLE 15 B.—SUMMARY of Accidents to Persons for the

A.—ACCIDENTS RESULTING FROM THE

EMPLOYEES—

Number.	1	2	3	4	5	6	7	8	9	10	11
		KIND OF									
	NAME OF RAILWAY.	Coupling or Uncoupling.		Coupling.		Derailments.		Parting of Trains.		Locomotives or Cars Breaking Down.	
		Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
1	Alberta Ry. and Irrigation Co.	1									
2	Algoma Central and Hudson Bay.						1				
3	Bay of Quinte		4								
4	Bessemer and Barry's Bay		1								
5	Canada Southern		2				3		1		
	Canadian Gov't Railways—										
6	Intercolonial		14		3	1	13				
7	Prince Edward Island		3								
8	Canadian Northern	2	10			1	10				
9	Canadian Northern, Quebec		2								
10	Canadian Pacific	8	37	24	26	9	12		4		4
11	Crowsnest Southern				2		2				
12	Dominion Atlantic										
13	Grand Trunk (in Canada)	2	11	6	25	1	11		1		1
14	Grand Trunk (Canada Atlantic)		1		1	1	2				
15	Halifax and Southwestern		1				1				
16	Hereford						1				
17	London and Port Stanley										
18	Manitoulin and North Shore				1						
19	Maritime Railway and Coal Co.		1								
20	Massawippi Valley										1
21	Montreal and Atlantic	1	2	1	5						
22	Montreal and Province Line						2				
23	Montreal and Vermont Junction										
24	Morrissey, Fernie and Michel										
25	Moncton and Buctouche										
26	Nelson and Fort Sheppard										
27	New Brunswick Southern										
28	Ottawa and New York										
29	Père Marquette (in Canada)		3						1		
20	Quebec and Lake St. John		2		2						
31	Quebec Ry., Light and Power Co.										
32	Quebec, Montreal and Southern	1	2	1	1						
33	Red Mountain						1				
34	Stanstead, Shefford and Chambly										
35	St. Lawrence and Adirondack								1		
36	Temiscouata	1	2								
37	Temiskaming & Northern Ontario	1									
38	Toronto, Hamilton and Buffalo										
39	Vancouver, Victoria and Eastern		1	3	3	2	2				
40	Wabash (in Canada)				5						
	Final total	17	99	35	74	15	61		8		6

SESSIONAL PAPER No. 20b

Year ending June 30, 1909, showing kind of Accident.

MOVEMENT OF TRAINS, LOCOMOTIVES OR CARS.

TRAINMEN.

12	13	14	15	16	17	18	19	20	21	22	23	
ACCIDENT.												
Falling from Trains, Locomotives or Cars.		Jumping on or off Trains, Locomotives or Cars.		Struck by Trains, Locomotives or Cars.		Overhead Obstructions.		Other Causes.		Total Accidents to Trainmen.		
Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	
	1									1	1	1
											1	2
									1		5	3
											1	4
	5		5		1			1	15	1	32	5
1	6		3	1	2				28	3	69	6
									2		5	7
1	12		11		4			1	17	5	64	8
2	1		1				1	1	6	3	11	9
8	34	3	24	3	18		3	4	65	59	227	10
			1						3		8	11
	1										1	12
6	33	1	9	2	8		1	1	40	19	140	13
1	2			1	1		2		6	3	15	14
			1								3	15
											1	16
									1		1	17
											1	18
											1	19
					1						2	20
1			1		1				2	2	12	21
1										1	2	22
							1				1	23
1					1				1		3	24
		1								1		25
									1		1	26
1										1		27
									1		1	28
1	4		5						5	1	18	29
			3						1		8	30
	2		1								3	31
										2	3	32
											1	33
	1				1				1		3	34
	1				1						3	35
	1		1		1				1	1	6	36
			1							1	1	37
		1			1			2	2	3	3	38
	3		2						8	5	19	39
1	3								8	1	16	40
23	112	6	69	7	41		8	10	215	113	693	

TABEE 15 C.—SUMMARY of Accidents to Persons for

ACCIDENTS RESULTING FROM THE MOVEMENT

TABLE 15, C. EMPLOYEES—

Number.	NAME OF RAILWAY.	22	26	27	28	29	30	31	32	33	34	35
			KIND OF									
			Coupling or Uncoupling.		Collisions.		Derailments		Parting of Trains.		Locomotives or Cars breaking down.	
			Killed	Injured.	Killed	Injured.	Killed	Injured.	Killed	Injured.	Killed	Injured.
1	Canada Southern											
2	Can. Gov't. Ry.—Intercolonial											
3	Canadian Northern							2				
4	Canadian Northern, Quebec											
5	Canadian Pacific		1		1							
6	Crowsnest Southern											
7	Dominion Atlantic											
8	Grand Trunk											
9	Montreal and Atlantic											
10	Nelson and Fort Sheppard					1						
11	Orford Mountain											
12	Père Marquette											
13	Sydney & Louisburg (Dom. Coal Co)											
14	Vancouver, Victoria and Eastern							1				
15	Wabash (in Canada)											
	Final total		1		1	1		3				

TABLE 15, D. EMPLOYEES—

1	Can. Gov't. Ry.—Intercolonial											
2	Canadian Pacific											
3	Vancouver, Victoria and Eastern											
	Final total											

the Year ending June 30, 1909, showing kind of Accident.

OF TRAINS, LOCOMOTIVES OR CARS.

TRACKMEN.

36	37	38	39	40	41	42	43	44	45	46	47	
ACCIDENT.												
Falling from Trains, Locomotives Cars.		Jumping on or off Trains, Locomotives or Cars.		Struck by Trains, Locomotives or Cars.		Overhead Obstructions.		Other causes.		Total.		
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed	Injured.	Killed	Injured.	Killed.	Injured.	Number.
.....	.....	.....	1	1	.....	.....	.....	.....	2	1	3	1
.....	.....	.....	.....	.....	.....	.....	.....	2	.....	2	.....	2
.....	1	.....	.....	1	5	.....	.....	.....	.....	1	8	3
.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	4
1	6	1	7	20	10	.....	.....	2	15	26	38	5
.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	3	6
.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	7
.....	3	.....	.....	1	.....	.....	.....	.....	2	1	5	8
.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	9
.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2	10
.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	11
.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	12
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	13
.....	1	.....	1	.....	2	.....	.....	.....	5	.....	10	14
.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2	.....	15
1	12	1	9	28	20	.....	2	5	24	37	71	

STATION MEN.

.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
1	1	.....	.....	1	1	....	.....	.....	6	2	8	2
.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	3
1	2	.....	.....	1	1	..	.....	.....	7	2	10	

TABLE 15 E.—SUMMARY of Accidents to Persons for

A—ACCIDENTS RESULTING FROM THE MOVEMENT

EMPLOYEES—SWITCH TENDERS,

Number.	Name of Railway.	Kind of									
		Coupling or Uncoupling.		Collisions.		Derailments.		Parting of Trains.		Locomotives or Cars breaking down.	
		Killed	Injured.	Killed	Injured.	Killed	Injured.	Killed	Injured.	Killed	Injured.
1	Canada Southern										
2	Canadian Pacific		13								
3	Grand Trunk		2								
	Total		15								

TABLE 15, F—EMPLOYEES

1	Canada Southern		1								
	Canadian Govt. Railway—										
2	Intercolonial										
3	Canadian Northern										
4	Canadian Pacific										
5	Montreal and Atlantic										
	Total		1								

TABLE 15, G—EMPLOYEES—

1	Canadian Northern, Quebec										
2	Grand Trunk										
3	" (Canada Atlantic)										
	Total										

TABLE 15, H.—EMPLOYEES—

1	Canada Southern										
	Canadian Govt. Railway—										
2	Intercolonial										
3	Canadian Northern										
4	Canadian Pacific		2	1	4						
5	Crowsnest Southern				1						
6	Dominion Atlantic										
7	Grand Trunk		8	3	1		1		1	1	
8	" (Canada Atlantic)				4						
9	Père Marquette										
10	Quebec, Montreal and Southern				1						
11	Vancouver, Victoria and Eastern										
	Total		10	4	11		1		1	1	

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the Year ending June 30, 1909, showing kind of Accident.

OF TRAINS, LOCOMOTIVES OR CARS.

CROSSING TENDERS AND WATCHMEN.

36	37	38	39	40	41	42	43	44	45	46	47	
ACCIDENT.												
Falling from Trains, Locomotives or Cars.		Jumping on or off Trains, Locomotives or Cars.		Struck by Trains, Locomotives or Cars.		Overhead Obstructions.		Other causes.		Total Accidents to Switch Tenders, Crossing Tenders, and Watchmen.		
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed	Injured.	Killed	Injured.	Killed.	Injured.	Number.
									1		1	1
		1	4	2	1					3	18	2
					3				3		8	3
		1	4	2	4				4	3	27	

—SHOPMEN.

				2						2	1	1
								1		1		2
	1				2				1	4	3	
1	3	1	1		2			1	5	3	11	4
				1						1		5
1	4	1	1	3	4			2	6	7	16	

TELEGRAPH EMPLOYEES.

									1		1	1
					1						1	2
					1						1	3
					2				1		3	

OTHER EMPLOYEES.

				1	1					1	1	1
									1		1	2
	2		2		1						5	3
1	7		3	5	2				7	7	25	4
											1	5
					1						1	6
	3		4	5	8		1	1	4	10	31	7
1				1	1					2	5	8
					2						2	9
			1								2	10
			2						1		3	11
2	12		12	12	16		1	1	13	20	77	

TABLE 15 I.—Summary of Accidents to Persons for the Year ending June 30, 1909, showing kind of Accident.

A.—ACCIDENTS RESULTING FROM THE MOVEMENT OF TRAINS, LOCOMOTIVES OR CARS.

OTHER PERSONS TRESPASSING.

195	198	199	204	205	206	207	208	209	210	211	212	213	214	215	216	217
Number.	Name of Railway.	KIND OF ACCIDENT.															
		Derailments.		Falling from Trains, Locomotives or Cars.		Jumping on or off Trains, Locomotives or Cars.		Struck by Trains, Locomotives, or Cars						Other causes.		Total Accidents to other Persons—Trespassing.	
								At Highway Crossings.		At Stations.		At other Points along Track.					
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1	Brandon, Saskatchewan and Hudson Bay											1				1	
2	Canada Southern				1							5				5	1
3	Canadian Government Ry.—Intercolonial		2	1	2	1	1					2	8			11	13
4	Canadian Northern					2						6	3			8	3
5	Canadian Northern, Quebec						1					1				1	1
6	Canadian Pacific	5		11	2	9	3	14	9	11	8	39	13	4	1	93	36
7	Crowsnest Southern						1										1
8	Dominion Atlantic			1												1	
9	Grand Trunk			4	2	2	5	5	4	3		37	14		3	51	28
10	Grand Trunk (Canada Atlantic)							1				2	1			3	1
11	Massawippi Valley					1										1	
12	Montreal and Atlantic							1								1	
13	Montreal and Province Line									1						1	
14	New Westminster Southern									1	1					1	1
15	Père Marquette													1		1	
16	Quebec Central									1		2				3	
17	Quebec Ry., Light and Power Co								1								1
18	Stanstead, Shefford and Chambly								1								1
19	Sydney and Louisburg					1	1									1	1
20	Temiskaming and Northern, Ontario							1			1		1		1	1	3
21	Thousand Islands												1				1

22	Toronto, Hamilton and Buffalo						1					1		1		2	1
23	Vancouver, Victoria and Eastern												2				2
24	Wabash (in Canada)			2								2				4	
	Final Total	5	2	19	7	16	13	22	15½	17	10	105	43	6	5	190	95

TABLE 15, J.—OTHER PERSONS—NOT TRESPASSING.

1	Canada Southern							7	1	1						8	4
2	Canadian Government Ry.—Intercolonial						1	6			3	1				7	4
3	Canadian Northern							4	5				1			4	6
4	Canadian Northern, Ontario					1										1	
5	Canadian Pacific			1				12	15	1		1	1	9	22	24	38
6	Grand Trunk				1			21	29				1		1	21	32
7	Grand Trunk (Canada Atlantic)							1	2							1	2
8	St. Lawrence and Adirondack								2								
9	Sydney and Louisburg							1								1	
10	Wabash (in Canada)								1								1
	Final Total			1	1	1	1	52	58	2	3	2	3	9	23	67	89

TABLE 15K.—SUMMARY of Accidents to Persons for the

B.—ACCIDENTS ARISING FROM CAUSES OTHER THAN THOSE RESULTING

EMPLOYEES—STATION

Number.	Name of Railway.	Station Men.									
		Kind of Accident.									
		Handling Traffic.		Handling Tools, Machinery, &c.		Handling Supplies, &c.		Getting on or off Locomotives or Cars at rest.		Other Causes.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1	Algoma Central and Hudson Bay.	....	.....	.. .	. ...	.....	.....	.....	.....	. . ..	.....
2	Bay of Quinté	.....	.....	.....	.....	.....	. .	.. ..	.....	. .	.....
3	Canada Southern	.....	.....	.	....	.....	.....	..	1	.....	1
	Canadian Govt. Ry.—										
4	Prince Edward Island.	.... .	....	...	.....	....	.....	.....	.... .	.....	1
5	Canadian Northern	.....	....	....	.....	.....	....	.....	.....	.....	.. ..
6	" " (Ontario).....	.....	.....	...	.....	.....	....	.....	.....	.....	.....
7	" " (Quebec).....	.....	1	...	.....	....	.....	....	.....	.....	1
8	Canadian Pacific	.. ..	12	3	6	.....	.....	.....	.....	2	1
9	Grand Trunk.	....	....	....	.....	.....	.. ...	..	. ..	....	....
10	" " (Canada Atlantic)..	....	.....	....	.....	... .	....	.....	.....	.....	.....
11	Halifax and Southwestern.	.....	.....	.....	.. ..	.....	....	.....	.....	.....	.....
12	Montreal and Atlantic.....	.....	.....	.....	...	.....	.....	.....	.....	. . .	.....
13	Montreal and Vermont Junction. . . .	1	.....	.....	.....	.....	... .	.....	.....	....	.....
14	Ottawa and New York.....	...	.....	.....	.....	.. ..	...	.....	.....	.....	.....
15	Père Marquette...	.....	.....	. .	.....	.....	.....	.. ..	.....	.....	.....
16	Quebec and Lake St. John.....	.....	1	.....	.....	.....	.....	.... .	.....	....	.....
17	Quebec, Montreal and Southern..	... .	.....	.....	.....	.....	.....	.....	.....	. . .	.....
18	Temiscouata	.....	.....	.....	...	.....	...	...	....	.....	5
19	Toronto, Hamilton and Buffalo ..	.....	.....	.....	. .	. ..	.....	. ..	.. .	....	.....
20	Vancouver, Victoria and Eastern.	.....	1	.....	.....	.....	... ..	...	.....	.....	.....
	Total.	.....	16	3	6	.....	.....	....	1	2	9

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Year ending June 30, 1909, showing kind of Accident.

FROM THE MOVEMENT OF TRAINS, LOCOMOTIVES, OR CARS.

MEN AND SHOPMEN.

Total Accidents to Station Men.		Shopmen.										Total Accidents to Shopmen.		
		Kind of Accident.												
		Handling Traffic.		Handling Tools, Machinery, &c.		Handling Supplies, &c.		Getting on or off Locomotives or Cars at rest.		Other Causes.				
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number.
											2		2	1
					1								1	2
	2				30		9		2	1	18	1	59	3
	1				7						3		10	4
					27		9		7		7		50	5
					1								1	6
	2				9								9	7
5	19		2	2	37		6		2		26	2	73	8
					1					2	1	2	2	9
					1						1		2	10
					1								1	11
					4		3				9		16	12
	1													13
					2								2	14
					2								2	15
	1				20						6		26	16
					1								1	17
	5				4		5						9	18
					1								1	19
	1				1						1		2	20
5	32		2	2	150		32		11	3	74	5	269	

TABLE 15L.—SUMMARY of Accidents to Persons for the

B.—ACCIDENTS ARISING FROM CAUSES OTHER THAN THOSE RESULTING

EMPLOYEES—TRACKMEN

Number.	Name of Railway.	Trackmen.									
		Kind of Accident.									
		Handling Traffic.		Handling Tools, Machinery, &c.		Handling Supplies, &c.		Getting on or off Locomotives or Cars at rest.		Other Causes.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1	Algoma Central and Hudson Bay										
2	Bay of Quinté				2						
3	Brockville, Westport and Northwestern										1
4	Canada Southern				1		9				3
	Canadian Govt. Ry.—										
5	Intercolonial										
6	Prince Edward Island				4						4
7	Canadian Northern				8		21		1		3
8	" " (Ontario)										
9	" " (Quebec)				1						
10	Canadian Pacific		3	3	31	1	20		4	4	74
11	Crowsnest Southern				1		8				1
12	Dominion Atlantic										
13	Grand Trunk		1		1		1				5
14	" " (Canada Atlantic)										1
15	London and Port Stanley										
16	Massawippi Valley						1				
17	Montreal and Atlantic				1		2		1		
18	Montreal and Vermont Junction										
19	Nelson and Fort Sheppard				1						
20	New Westminster Southern						1				
21	Ottawa and New York										
22	Père Marquette						1				1
23	Quebec and Lake St. John										
24	Red Mountain										
25	Temiscouata				4						
26	Temiskaming and Northern Ontario										
27	Vancouver, Victoria and Eastern						18			1	8
	Total		4	3	55	1	82		6	5	101

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Year ending June 30th, 1909, showing Kind of Accident.

FROM THE MOVEMENT OF TRAINS, LOCOMOTIVES OR CARS.

AND OTHER EMPLOYEES.

Total Accidents to Trackmen.		Other Employees.												
		Kind of Accident.										Total Accidents to other Employees.		
		Handling Traffic.		Handling Tools, Machinery, &c.		Handling Supplies, &c.		Getting on or off Locomotives or Cars at rest.		Other Causes.				
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number.
											1		1	1
	2													2
	1													3
	13		1		1	1	1		4		6	1	13	4
			1								1		2	5
	8		2		3				1		5		11	6
	33		25		11		8		2		19		65	7
	1						1						1	8
	1										2		2	9
8	132		3		16	1	5		5	3	42	4	71	10
	10				3		3				2		8	11
											1		1	12
	8		1	1			7		3	2	7	3	18	13
	1						3						3	14
					1						1		2	15
	1													16
	4		2		1								3	17
					1								1	18
	1													19
	1				1								1	20
											2		2	21
	2		2		1						1		4	22
			1										1	23
											1		1	24
	4													25
											1		1	26
1	26		1		2						18		21	27
9	248		39	1	41	2	28		15	5	110	8	233	

ELECTRIC

TABLE 1.—SUMMARY Statement of Description of Road, Mileage

Number.	1 Name of Railway.	2 Track. Length of Road, First Main Track.	3 Track. Length of Second Main Track.	4 Track. Total Length of Main Track.	5 Track. Length of Sidings and Turnouts.
1	Berlin and Waterloo	3·12		3·12	·38
2	Leased Line– Berlin and Bridgeport	2·40		2·40	·10
3	Brantford and Hamilton Electric	23·00		23·00	
4	British Columbia	77·78	13·44	91·22	6·52
5	Cape Breton	11·58		11·58	·29
6	Chatham, Wallaceburg and Lake Erie	34·00		34·00	
7	Cornwall Street	4·00		4·00	2·50
8	Egerton Tramway Co., N.S., now Picton County Electric	7·90		7·90	·20
9	Galt, Preston and Hespeler	17·81	1 36	19·17	7·25
10	Leased Line—Preston to Berlin				
11	Grand Valley	38·29		38·29	·19
12	Guelph Radial	6·00		6·00	·33
13	Halifax Tramway	9·908	3·094	13 002	·387
14	Hamilton and Dundas	7·00		7 00	
15	Hamilton, Grimsby and Beamsville	22·00		22·00	
16	Hamilton Radial	25·00		25·00	
17	Hamilton Street	22·00		22 00	
18	Hull	11·51	11·51	23·02	2·32
19	International Transit Co	3·68		3·68	·22
20	Kingston, Portsmouth and Cataraqui	8·00		8·00	
21	Levis County	10·25		10·25	
22	London Street	25·73	6·79	32·52	·73
23	Montreal Park and Island	26·74	14·61	41·35	3·72
24	Montreal Street	74·68	57·18	131·86	16·11
25	Montreal Terminal	18·22	4·66	22·88	7·34
26	Nelson Tramway				
27	Niagara Falls Park and River	10·02	9·31	19·33	1·42
28	Niagara, St. Catharines and Toronto	40·06		40·06	5·56
29	Oshawa	4·00		4·00	4·83
30	Ottawa	23·40	20·64	44·04	·50
31	Peterborough Radial	5·10		5·10	·142
32	Port Arthur Street	9·321	6·458	15·779	·741
33	Quebec Ry., Light & Power Co. (Citadel)	17 22		17 22	
34	Quebec Ry., Light & Power Co. (Montmorency)	30·00	6·30	36·30	2·00
35	Sandwich, Windsor and Amherstburg	35·81		35·81	
36	Sarnia	8·25		8·25	1·00
37	Sherbrooke Street	7·00		7·00	
38	South-western Traction Co	28·50		28·50	1·25
39	St. John	12·50	6·50	19·00	
40	St. Stephen, N.B	7·00		7·00	
41	St. Thomas Street	7·50		7·50	·20
42	Sydney and Glace Bay	20·98		20·98	·33
43	Toronto Street	49·654	53·205	102·859	4·384
44	Toronto Suburban	9·84		9·84	·42
45	Toronto and York Radial	72·42		72·43	8·42
46	Windsor, Essex and Lake Shore Rapid	36·167		36·167	3·840
47	Winnipeg Street	61·62		61·62	
48	Yarmouth Street	2·00		2·00	
	Total	988·970	215·057	1,204·027	83 624

RAILWAYS.

and Passengers carried for the Year ending June 30, 1909.

6	7	8	9	10	11	12	13	
		Mileage.			Passengers Carried.			
Total Computed as Single Track	Track Leased.	Passenger Car Mileage.	Freight, Mail and Express Car Mileage.	Total Car Mileage.	Fare Passengers Carried.	Transfer Passengers Carried.	Total Passengers Carried.	Number.
3·50	....	89,987	.....	89,987	590,705	21,876	612,581	1
2·50	... .	34,400	.....	34,400	128,010	.....	128,010	2
23·00	.....	246,915	39,141	286,056	247,195	.....	247,195	3
97·74	21·00	4,647,797	114,934	4,762,731	25,183,739	.....	25,183,739	4
11·87	....	321,570	.....	321,570	1,524,437	359,219	1,883,656	5
34·00	.....	104,623	21,932	126,555	257,276	....	257,276	6
6 50	.....	192,284	12,882	205,166	381,536	.....	381,536	7
8·1	.....	132,887	5,023	137,910	916,142	.....	916,142	8
26·42	.....	223,725	29,251	252,976	730,880	....	730,880	9
.....	.....	.....	.....	.....	.....	....	....	10
38·48	.....	467,061	....	467,061	693,778	60,564	754,342	11
6·33	....	200,800	.....	200,800	567,413	.....	567,413	12
13·389	.....	814,375	.....	814.375	4,162,986	342.210	4,505,196	13
7·00	.....	119,271	589	119,860	423,257	.....	423,257	14
22·00	.....	275,801	37,257	313,058	421,699	.. ..	431,699	15
25·00	.....	392,880	21,788	414,668	1,013,900	.....	1,013,900	16
22·00	....	1,620,418	.....	1,620,418	8,076,511	.....	8,076,511	17
25·34	1·82	529,837	24,198	554,035	955,230	73,000	1,028,230	18
3 90	.....	283,284	.....	283,284	895,198	3,789	898,987	19
8·00	... .	199,680	.....	199,680	753,265	145,872	899,137	20
10·25	....	288,920	6,100	295,020	1,555,775	34,229	1,590,004	21
33·25	.....	1,426,339	.....	1,426,339	6,460,709	1,020,242	7,480,951	22
45·07	.....	954,316	3,817	958,133	3,438,693	341,266	3,779.959	23
147·97	8·58	14,314,541	100.311	14,414,852	93,381,633	31,577,363	124,958,996	24
30·22	.. ..	627,670	22,077	649,747	1,632,158	115,931	1,748,089	25
....	.....	.....	.....	.....	.....	.....	....	26
20·75	.....	356,652	.....	356,652	1,180,882	.....	1,180,882	27
45·62	.....	666,969	81,429	748,398	2,360,107	18,605	2,378,712	28
8·83	.....	40,284	17,203	57,487	126,999	....	126,999	29
44·54	2·22	3,675,888	15,000	3,690,888	14,216,621	.....	14,216,621	30
5·242	....	257,450	.....	257,450	622,145	.....	622,145	31
16·520	.....	389,420	.....	389,420	.....	.....	....	32
17·22	....	1,394,744	... .	1,394,744	6,859,679	3,266,000	10,125,679	33
38·30	.....	327,156	... .	327,156	1,271,622	.....	1,271,622	34
35·81	.....	838.673	....	838,673	2,911,358	343,324	3,254,682	35
9·25	.....	143,990	.....	143,990	645,463	.. ..	645,463	36
7·00	.....	288,020	... .	288,020	734,319	108,951	843,270	37
29·75	.....	304,928	35,611	340.539	497,195	22,259	519,454	38
19·00	... .	983,648	.....	983,648	3,691,809	1,318,894	5,010,703	39
7·00	3·00	183,960	.....	183,960	590,717	23,389	614,106	40
7·70	.....	333,032	.....	333,032	455,480	151,820	607,300	41
21·31	2·28	256,193	11,154	267,347	1,937,880	22,220	1,960,100	42
107·243	.....	14,859,474	.....	14,839,474	92,850,010	34,951,318	127,801,328	43
10·26	....	204,344	.....	204,344	891,203	40,648	931,851	44
80·85	.....	950,200	82,803	1,033,003	3,595,892	....	3,595,892	45
40·007	.. ..	191,130	55,220	246,350	244,280	.....	244,280	46
61·62	.....	4,279,590	....	4,279,590	23,946,885	7,307,956	31,248,841	47
2·00	.....	....	....	.....	.....	.....	....	48
1,287·651	38·90	59,415,126	737,720	60,152,846	314,026,671	81,670,945	395,697,616	

ELECTRIC

TABLE 2—SUMMARY STATEMENT OF CAPITAL

Number.	1	2	3	4	5
	NAME OF RAILWAY.	STOCKS.			FUNDED
		Amount Outstanding	Amount per Mile of Line.	Proportion to total Railway Capital. 100 x Col.2 / Col. 12.	Amount Outstanding Cols. 8+9+10+11
		$	$	Per cent.	$
1	Berlin and Waterloo				101,316
2	Leased Line—Berlin and Bridgeport	17,000	7,083	87·50	2,200
3	Brantford and Hamilton Electric	300,000	13,043	31·25	660,000
4	British Columbia	6,326,666	82,164	51·12	6,051,214
5	Cape Breton	1,234,000	106,563	57 00	930,000
6	Chatham, Wallaceburg and Lake Erie	639,000	18,794	52·49	578,500
7	Cornwall street	200,000	30,769	100·00	
8	Egerton Tramway Co. (now Pictou County)	250,000	30,864	57·47	185,000
9	Galt, Preston and Hespeler	49,850	2,799	7·36	626,852
10	Leased Line—Preston to Berlin	1,000	102	100·00	
11	Grand Valley	1,100,000	26,004	61·50	688,800
12	Guelph Radial	108,000	18,000	100 00	
13	Halifax Tramway	1,400,000	140,210	69·60	607,200
14	Hamilton and Dundas	100,000	14,286	28·56	250,000
15	Hamilton, Grimsby and Beamsville	235,000	10,682	61·00	150,000
16	Hamilton Radial	111,150	4,446	8·74	1,160,000
17	Hamilton Street	205,000	9,318	29·08	500,000
18	Hull	292,000	22,601	100·00	
19	International Transit Co	150,000	40,761	22·70	512,000
20	Kingston, Portsmouth and Cataraqui	83,100	10,388	45·60	99,250
21	Levis County	382,600	37,327	71·69	151,100
22	London Street	550,000	16,566	48·90	575,000
23	Montreal Park and Island	1,035,900	22,984	50·27	1,025,000
24	Montreal Street	10,000,000	142,857	78·55	4,420,000
25	Montreal Terminal	1,000,000	33,091	62·00	613,000
26	Nelson Tramway				
27	Niagara Falls Park and River				609,000
28	Niagara, St. Catharines and Toronto	925,000	23,090	51·65	866,000
29	Oshawa	40,000	4,530	31·14	88,452
30	Ottawa	1,247,700	28,013	71·40	500,000
31	Peterborough Radial	100,000	19,608	55·67	79,631
32	Port Arthur and Fort William				461,488
33	Quebec Ry. Light and Power Co. (Citadel) / Quebec Ry. Light and Power Co. (Montmorency)	3,250,000	75,581	56·19	2,533,899
34	Sandwich, Windsor and Amherstburg	297,000	8,294	37·74	490,000
35	Sarnia Street	90,000	9,730	53·86	77,100
36	Sherbrooke Street	200,000	28,571	57·14	150,000
37	Southwestern Traction Co	359,100	12,600	33·51	700,000
38	St. John	800,000	64,000	44·41	1,000,000
39	St. Stephen, N.B	100,000	14,285	50·00	100,000
40	St. Thomas Street				62,272
41	Sydney and Glace Bay	500,000	26,738	54·17	423,000
42	Toronto Street	8,000,000	69,771	66 67	3,998,327
43	Toronto Suburban	80,000	8,130	35 85	143,155
44	Toronto and York Radial	2,000,000	24,737	56·18	1,560,000
45	Windsor, Essex and Lake Shore Rapid	750,000	20,833	50·00	750,000
46	*Windsor and Tecumseh	100,000			189,000
47	Winnipeg Street	7,337,367	119,113	54·98	5,000,000
48	Yarmouth Street				
	Total	51,946,433			39,658,556

*Under construction.

SESSIONAL PAPER No. 20b

RAILWAYS.

for the Year ending June 30, 1909.

6	7	8	9	10	11	12	13	
DEBT.		FUNDED DEBT.				SUMMARY.		
Amount per Mile of Line.	Proportion to Total Railway Capital. 100 x Col.5 / Col. 12.	Designation. Bonds.	Miscellaneous Obligations.	Income Bonds.	Equipment Trust Obligations.	Total Railway Capital. Cols. 2+5.	Amount per Mile of Line. Cols. 3+6.	Number
$	Per cent.	$	$	$	$	$	$	
28,947	100·00	101,316				101,316	28,947	1
917	12·50	2,200				19,200	8,000	2
28,696	68·75	660,000				960,000	41,739	3
78,587	48·88	6,051,214				12,377,880	160,751	4
80,311	43·00	930,006				2,164,000	186,874	5
17,014	47·51	578,500				1,217,500	35,808	6
						200,000	30,769	7
22,839	42·53	185,000				435,000	53,703	8
35,196	92·64	100,000	526,852			676,702	37,995	9
						1,000	102	10
16,288	38·50	688,800				1,788,800	42,292	11
						108,000	18,000	12
61,260	30·40	600,000	7,000			2,007,000	201,470	13
35,714	71·44	250,000				350,000	50,000	14
6,818	39·00	150,000				385,000	17,500	15
46,400	91·26	1,160,000				1,271,150	50,846	16
22,727	70·92	500,000				705,000	32,045	17
						292,600	22,601	18
139,130	77·30	512,600				662,000	179,891	19
12,496	54·40	99,250				182,350	22,794	20
14,741	28·31	151,109				533,700	52,068	21
17,268	51·10	575,000				1,125,000	33,834	22
22,742	49·73	1,025,000				2,060,900	45,726	23
63,143	21·45	4,420,000				14,420,000	206,000	24
20,284	38·00	613,000				1,613,000	53,375	25
								26
59,880	100·00	600,000				600,000	59,880	27
21,617	48·35	866,000				1,791,000	44,707	28
10,017	68·86	88,452				128,452	14,547	29
11,225	28·60	506,000				1,747,700	39,238	30
15,614	44·33	50,000	29,631			179,631	35,222	31
28,843	100·00	461,488				461,488	28,843	32
58,927	43·81	2,500,000	10,000		23,899	5,783,899	134,508	33
13,683	62·26	490,000				787,000	21,977	34
8,335		77,100				167,100	18,065	35
21,429	42·86				150,000	350,000	50,000	36
25,000	66·49	700,000				1,059,100	37,600	37
80,000	55·59	1,000,000				1,809,000	144,000	38
14,285	50·00	100,000				200,000	28,570	39
8,303	100·00		62,272			62,272	8,303	40
22,620	45·83	423,000				923,600	49,358	41
34,870	33·33	3,998,327				11,998,327	104,641	42
14,548	64·15	140,000	3,155			223,155	22,678	43
19,295	43·82	1,560,000				3,560,000	44,032	44
20,833	50·00	750,000				1,500,000	41,666	45
		189,000				289,000		46
81,168	45·02	5,000,000				12,337,367	200,281	47
								48
		38,845,747	368,910		173,899	91,604,989		

ELECTRIC

TABLE 3.—SUMMARY of Income Account

Number.	1	2	3	4	5
	NAME OF RAILWAY.	EARNINGS AND INCOME.			
		Gross Earnings from Operation.	Operating Expenses.	Net Earnings from Operation.	Miscellaneous Income.
		$ cts.	$ cts.	$ cts.	$ cts.
1	Berlin and Waterloo	29,564 53	22,797 71	6,766 82	
2	Leased Line—Berlin and Bridgeport	5,324 99	4,880 70	444 29	
3	Brantford and Hamilton Electric	84,039 37	63,666 22	20,373 15	
4	British Columbia	1,410,007 54	895,565 45	514,442 09	
5	Cape Breton	84,919 28	53,944 55	30,974 73	60,921 59
6	Chatham, Wallaceburg and Lake Erie	55,853 26	28,383 52	27,469 74	6,347 47
7	Cornwall Street	26,432 05	23,915 45	2,516 60	
8	Egerton Tramway Co., now Pictou County	43,770 50	28,526 39	15,244 11	6,645 45
9	Galt, Preston and Hespeler	117,613 29	68,190 22	49,423 07	
10	Leased Line—Preston to Berlin				
11	Grand Valley	77,221 25	70,150 65	7,070 60	
12	Guelph Radial	27,847 28	22,782 35	5,064 93	
13	Halifax Tramway	184,927 51	108,785 94	76,141 57	108 99
14	Hamilton and Dundas	41,192 58	32,117 49	9,075 09	2,795 68
15	Hamilton, Grimsby and Beamsville	92,305 72	74,573 43	17,732 29	1,802 33
16	Hamilton Radial	119,224 52	95,950 11	23,274 41	
17	Hamilton Street	327,702 70	223,657 21	104,045 49	
18	Hull	75,731 89	76,534 59	—802 70	31,404 30
19	International Transit Co	38,071 21	32,436 78	5,634 43	12,720 00
20	Kingston, Portsmouth and Cataraqui	30,625 15	31,145 35	—520 20	1,116 98
21	Levis County	59,691 42	59,196 02	495 40	
22	London Street	238,685 41	162,493 47	76,191 94	190 22
23	Montreal Park and Island	272,201 57	187,249 98	84,951 59	
24	Montreal Street	3,765,137 47	2,187,190 30	1,577,947 17	
25	Montreal Terminal	108,615 70	98,848 74	9,766 96	
26	Nelson Tramway				
27	Niagara Falls Park and River	133,514 02	70,315 30	63,198 72	6,625 69
28	Niagara, St. Catharines and Toronto	231,704 76	155,934 48	75,770 28	
29	Oshawa	55,370 01	41,727 25	13,642 76	696 61
30	Ottawa	644,100 72	417,481 46	226,619 26	
31	Peterborough Radial	28,270 66	25,001 01	3,269 65	475 44
32	Port Arthur and Fort William	103,410 65	65,986 66	37,423 99	
33	Quebec Ry., Light and Power Co. (Citadel)	287,494 27	196,509 09	90,985 18	
34	Quebec Ry., Light and Power Co. (Montmorency)	151,386 05	104,246 87	47,139 18	
35	Sandwich, Windsor and Amherstburg	171,749 85	102,203 61	69,546 24	34,210 52
36	Sarnia Street	40,264 36	29,047 23	11,217 13	
37	Sherbrooke Street	31,176 38	32,593 72	—1,417 34	
38	Southwestern Traction Co	92,865 83	60,517 81	32,348 02	
39	St. John, N.B.	163,749 78	145,713 14	18,036 64	98,753 09
40	St. Stephen, N.B	29,649 30	26,480 11	3,169 19	
41	St. Thomas Street	18,690 58	22,235 57	—3,544 99	
42	Sydney and Glace Bay	97,566 65	60,525 21	37,041 44	368 84
43	Toronto Street	3,750,283 72	1,870,434 43	1,879,849 29	
44	Toronto Suburban	40,966 01	30,147 56	10,818 45	208 23
45	Toronto and York Radial	328,918 76	196,182 73	132,736 03	4,669 67
46	Windsor, Essex and Lake Shore Rapid	85,273 06	61,818 62	23,454 44	
	*Windsor and Tecumseh				
47	Winnipeg Street	1,008,614 36	517,151 22	491,463 14	718,063 86
48	Woodstock, Thames Valley and Ingersoll				
49	Yarmouth Street				
	Total	14,811,725 97	8,885,235 70	5,926,490 27	988,124 96

*Under construction.

SESSIONAL PAPER No. 20b

RAILWAYS.

for the Year ending June 30, 1909.

6	7	8	9	10	11	12	13	
	Deductions from Income.							
Gross Income less Operating Expenses.	Taxes.	Interest on Funded Debt.	Interest on Floating Debt.	Other Deductions from Income.	Total Deductions from Income.	Net Income.	Net Loss.	Number.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
6,766 82		5,338 30			5,338 30	1,428 52		1
444 29	137 87	110 00	776 37		1,024 24		579 95	2
20,373 15	1,473 05	39,600 00	16,436 51		57,509 56		37,136 41	3
514,442 09						514,442 09		4
91,896 32	3,315 23	43,570 83	289 31		47,175 37	44,720 95		5
33,817 21				28,925 00	28,925 00	4,892 21		6
2,516 60						2,516 60		7
21,889 56	749 07	9,000 00		6,984 27	16,733 34	5,156 22		8
49,423 07	1,753 57	5,000 00	1,273 31		8,026 88	41,396 19		9
								10
7,070 60	1,990 57				1,990 57	5,080 03		11
5,064 93						5,064 93		12
76,250 56	9,240 61				9,240 61	67,009 95		13
11,870 77	1,139 68	14,000 00			15,139 68		3,268 91	14
19,534 62	2,440 00	7,500 00			9,940 60	9,594 02		15
23,274 41	3,227 26	68,000 00	1,680 00		72,907 26		49,632 85	16
104,045 49	36,355 94	22,500 00	674 10		59,530 04	44,515 45		17
30,601 60	891 40				891 40	29,710 20		18
18,354 43	603 16	27,720 00	2,159 52		30,482 68		12,128 25	19
596 78	544 79	1,120 00			1,664 79		1,068 01	20
495 40	766 45	7,579 85	3,991 62		12,337 92		11,842 52	21
76,382 16	4,653 52	26,461 58	2,491 92	427 30	34,034 32	42,347 84		22
84,951 59	26,075 49	94,327 75	23,443 39		143,846 63		58,895 04	23
1,577,947 17						1,577,947 17		24
9,766 96	4,289 88	34,682 91			38,972 79		29,205 83	25
								26
69,824 41	2,332 09	30,000 00			32,332 09	37,492 32		27
75,770 28	3,509 73	53,428 64			56,938 37	18,831 91		28
14,339 37	261 77	4,250 00	1,312 82		5,824 59	8,514 78		29
226,619 26	17,891 18	20,000 00	7,581 29		45,472 47	181,146 79		30
3,745 09	85 20	2,500 00	1,467 07		4,052 27		307 18	31
37,423 99						37,423 99		32
90,985 18						90,985 18		33
47,139 18						47,139 18		34
103,756 76	2,600 00	22,900 01	714 90		26,214 91	77,541 85		35
11,217 13	417 53	3,430 56			3,848 09	7,369 04		36
—1,417 34		5,000 00	1,637 42		6,637 42		8,054 76	37
32,348 02	863 31	35,000 00			35,863 31		2,515 29	38
116,789 73	1,620 17	50,000 00			51,620 17	65,169 56		39
3,169 19	524 02	5,000 00			5,524 02		2,354 83	40
– 3,544 99							3,544 99	41
37,410 28	2,608 68	21,250 00			23,858 68	13,551 60		42
1,879,849 29	602,642 35	188,924 70			791,567 05	1,088,282 24		43
11,026 68	821 20		8,443 05	295 42	9,559 67	1,467 01		44
137,405 70	4,065 97	77,447 11	20,201 45		101,714 53	35,691 17		45
23,454 44	613 31	37,500 00	9,999 08		48,112 39		24,657 95	46
1,209,527 00	103,454 47	250,000 00			353,454 47	856,072 53		47
								48
								49
6,914,615 23	843,959 12	1,213,142 24	104,573 13	36,631 99	2,198,306 48	4,962,501 52	246,192 77	

ELECTRIC

TABLE 3.—SUMMARY of Income Account

Number.	14	15	16	17
	NAME OF RAILWAY.	DEDUCTIONS FROM NET INCOME.		
		Reserves and Special Charges.	Dividends.	Total Deductions from Net Income.
		$ cts.	$ cts.	$ cts.
1	Berlin and Waterloo			
2	Leased Line—Berlin and Bridgeport			
3	Brantford Street			
4	Brantford and Hamilton Electric			
5	British Columbia			
6	Cape Breton	9,141 67	14,040 00	23,181 67
7	Chatham, Wallaceburg and Lake Erie			
8	Cornwall Street			
9	Egerton Tramway Co., N.S		5,000 00	5,000 00
10	Galt, Preston and Hespeler			
11	Leased Line—Preston to Berlin			
12	Grand Valley			
13	Guelph Radial			
14	Halifax Tramway			
15	Hamilton and Dundas			
16	Hamilton, Grimsby and Beamsville			
17	Hamilton Radial			
18	Hamilton Street			
19	Hull			
20	International Transit Co			
21	Kingston, Portsmouth and Cataraqui			
22	Levis County			
23	London Street		32,711 76	32,711 76
24	Montreal Park and Island		18,900 00	18,900 00
25	Montreal Street			
26	Montreal Terminal			
27	Nelson Tramway			
28	Niagara Falls Park and River			
29	Niagara, St. Catharines and Toronto			
30	Oshawa			
31	Ottawa		149,697 34	149,697 34
32	Peterboro Radial			
33	Port Arthur and Fort William			
34	Quebec Railway, Light and Power Co. (Citadel)			
35	Quebec Railway, Light and Power Co. (Montmorency)			
36	Sandwich, Windsor and Amherstburg			
37	Sarnia Street		4,847 18	4,847 18
38	Sherbrooke Street			
39	South Western Traction Co			
40	St. John, N.B		48,000 00	48,000 00
41	St. Stephen, N.B			
42	St. Thomas Street			
43	Sydney and Glace Bay	5,299 97	10,000 00	15,299 97
44	Toronto Street	150,000 00	499,803 65	649,803 65
45	Toronto Suburban			
46	Toronto and York Radial			
47	Windsor, Essex and Lake Shore Rapid			
48	Windsor and Tecumseh			
49	Winnipeg Street		614,496 10	614,496 10
50	Woodstock, Thames Valley and Ingersoll			
51	Yarmouth Street			
	Total	164,441 64	1,397,496 03	1,561,937 67

SESSIONAL PAPER No. 20b

RAILWAYS.

for the Year ending June 30, 1909—*Continued.*

18	19	20	21	22	23	24	25	
Surplus for Year.	Deficit for Year.	Surplus at Beginning of Year.	Deficit at Beginning of Year.	Profit or Loss, Adjustments During Year.		Surplus at Close of Year.	Deficit at Close of Year.	Number.
				Credit.	Debits.			
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
1,428 52						1,428 52		1
	579 95						579 95	2
								3
	37,136 41		3,157 65				40,294 06	4
514,442 09						514,442 09		5
21,539 28		88,392 25				109,931 53		6
4,892 21						4,892 21		7
2,516 60						2,516 60		8
156 22		10,383 18				10,539 40		9
41,396 19						41,396 19		10
								11
5,080 03						5,080 03		12
5,064 93						5,064 93		13
67,009 95						67,009 95		14
	3,268 91	3,304 72			1,138 38		1,102 57	15
9,594 02		39,710 27			4,066 71	45,237 58		16
	49,632 85		63,121 76				112,754 61	17
44,515 45		53,660 49			28,348 18	69,827 76		18
29,710 20		24,454 62		100 00	10,474 51	43,790 31		19
	12,128 25		12,987 24		885 57		26,001 06	20
	1,068 01			3,150 36		2,082 35		21
	11,842 52		9,863 98				21,706 50	22
9,636 08		28,609 12		19 88	4,845 00	33,420 08		23
	77,795 04		899,020 08				976,815 12	24
1,577,947 17						1,577,947 17		25
	29,205 83		36,087 66		101 02		65,394 51	26
								27
37,492 32						37,492 32		28
18,831 91		163,285 09				182,117 00		29
8,514 78		44,985 58			243 72	53,256 64		30
31,449 45		55,299 19			13,582 87	73,165 77		31
	307 18			2,496 07		2,188 89		32
37,423 99						37,423 99		33
90,985 18						90,985 18		34
47,139 18						47,139 18		35
77,541 85		18,096 56				95,638 41		36
2,521 86		20,664 69				23,186 55		37
	8,054 76						8,054 76	38
	3,515 29		27,721 47	3,388 58			27,848 18	39
17,169 56		101,399 89				118,569 45		40
	2,354 83		19,672 99				22,027 82	41
	3,544 99						3,541 99	42
	1,748 37	82,061 12				80,312 75		43
438,478 59		2,371,584 40				2,810,062 99		44
1,467 01						1,467 01		45
35,691 17		59,388 85				95,080 02		46
	24,657 95		36,456 41				61,114 36	47
								48
241,576 43		164,489 34				706,065 77		49
								50
								51
3,421,212 22	266,841 14	3,629,769 36	1,108,089 24	9,154 89	63,685 96	6,988,758 62	1,367,238 49	

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TABLE 4—SUMMARY of Gross Earnings from

Number.	1 Name of Railway.	2 Car Earnings. Passengers.	3 Car Earnings. Freight.	4 Car Earnings. Mail Express.	5 Car Earnings. Other Car Earnings.
		$ cts.	$ cts.	$ cts.	$ cts.
1	Berlin and Waterloo	25,145 78		1,043 09	287 53
2	Leased Line—Berlin and Bridgeport	5,040 41			100 00
3	Brantford and Hamilton Electric	71,983 99	4,720 04	1,029 99	622 00
4	British Columbia	1,296,356 92	34,704 10	57,659 81	12,192 83
5	Cape Breton	82,691 39	341 80	140 85	46 00
6	Chatham, Wallaceburg and Lake Erie	37,031 29	18,094 57	727 40	
7	Cornwall Street	16,844 71	7,091 79		
8	Egerton Tramway Company, N.S., now Pictou County Electric	42,573 05	1,197 45		
9	Galt Preston and Hespeler	56,848 77	53,074 11	5,883 42	109 73
10	Leased Line—Preston to Berlin				
11	Grand Valley	73,146 68	2,037 69		
12	Guelph Radial	25,710 07	1,085 53		6 50
13	Halifax Tramway	184,046 89			
14	Hamilton and Dundas	39,400 34	1,019 47	187 90	99 00
15	Hamilton, Grimsby and Beamsville	63,107 58	19,435 57	5,932 70	205 00
16	Hamilton Radial	104,143 55	7,719 00	966 36	286 75
17	Hamilton Street	324,228 88			227 65
18	Hull	59,204 15	12,380 83	2,532 68	
19	*International Transit Co	36,954 48			
20	Kingston, Portsmouth and Cataraqui	30,625 15			
21	Levis County	54,668 27	2,567 15	690 00	
22	London Street	234,732 59	175 15	1,240 00	512 65
23	Montreal Park and Island	264,398 29	851 29		
24	Montreal Street	3,698,572 46	29,590 47		
25	Montreal Terminal	90,471 99	17,744 73	500 00	
26	Nelson Tramway				
27	Niagara Falls, Park and River	129,605 90		826 71	1,483 56
28	Niagara, St. Catharines and Toronto	165,579 39	57,200 52	1,031 47	6,876 01
29	Oshawa	8,796 38	41,901 76	3,186 76	
30	Ottawa	616,427 66		8,091 00	18 70
31	Peterborough Radial	28,270 66			
32	Port Arthur Street	99,112 46	1,400 89	1,164 79	109 00
33	Quebec Ry., Light and Power Co. (Citadel)	284,124 50			3,369 77
34	" " " (Montmorency)	133,541 51		3,203 89	3,450 00
35	Sandwich, Windsor and Amherstburg	153,520 51	5,509 90	800 00	394 45
36	Sarnia	29,908 85	3,669 26	4,096 60	
37	Sherbrooke Street	30,811 38			30 00
38	South Western Traction Co	81,531 57	8,182 52	2,344 28	
39	St. John	163,079 78			
40	St. Stephen, N.B.	29,493 30			
41	St. Thomas Street	16,725 23			18 00
42	Sydney and Glace Bay	90,430 47	4,102 44	1,503 98	775 10
43	Toronto Street	3,705,229 01			
44	Toronto Suburban	39,076 06			
45	Toronto and York Radial	282,763 02	44,155 74	2,000 00	
46	Windsor, Essex and Lake Shore Rapid	73,993 81	6,045 80	3,390 31	516 11
47	Winnipeg Street	1,000,806 30	92 10	277 71	2,448 75
48	Yarmouth Street				
	Total	14,080,755 63	386,091 67	110,451 70	34,185 09

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RAILWAYS.

Operation for the Year ending June 30, 1909.

6	7	8	9	10	11	12	13	14	
				Miscellaneous Earnings.					
Total Car Earnings.	Advertising.	Rent of Land or Buildings.	Rent of Tracks.	Rent of Equipment.	Sale of Power.	Other Miscellaneous Earnings.	Total Miscellaneous Earnings.	Total Gross Earnings from Operation.	Number.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
26,476 40	607 13	150 00	.....	.....	2,331 00	.....	3,088 13	29,564 53	1
5,140 41	.....	184 58	.....	.....	.....	.....	184 58	5,324 99	2
78,356 02	.....	3,240 00	.....	2,443 35	.....	.....	5,683 35	84,039 37	3
1,400,913 66	4,837 06	3,644 05	432 57	.....	.....	180 20	9,093 88	1,410,007 54	4
83,220 04	315 00	1,384 24	.....	.....	.....	.....	1,699 24	84,919 28	5
55,853 26	318 75	512 42	.....	.....	5,516 30	.....	6,347 47	62,200 73	6
23,936 50	360 50	.....	.....	.....	444 05	1,691 00	2,495 55	26,432 05	7
43,770 50	.....	.....	.....	.....	.....	.....	.....	43,770 50	8
115,916 03	.....	76 00	.....	.....	1,608 19	13 07	1,697 26	117,613 29	9
.....	.....	.....	.....	.....	.....	.....	.....	.....	10
75,184 37	763 75	.....	.....	753 40	.....	519 73	2,036 88	77,221 25	11
26,802 10	251 00	164 00	230 03	.....	326 59	73 56	1,045 18	27,847 28	12
184,046 89	880 62	.....	.....	.....	.....	.....	880 62	184,927 51	13
40,706 91	100 07	54 51	.....	331 09	.....	.....	485 67	41,192 58	14
88,680 85	.....	350 00	800 00	.....	2,474 87	.....	3,624 87	92,305 72	15
113,115 66	300 00	.....	.....	5,808 86	.....	.....	6,108 86	119,224 52	16
324,456 53	604 00	1,968 00	.....	674 17	.....	.....	3,246 17	327,702 70	17
74,117 66	312 50	100 08	1,200 00	.....	.....	1 65	1,614 23	75,731 89	18
36,954 48	581 22	.....	.....	.....	.....	535 51	1,116 73	38,071 21	19
30,625 15	300 00	816 98	.....	.....	.....	.....	1,116 98	31,742 13	20
57,925 42	425 00	.....	.....	.....	.....	1,341 00	1,766 00	59,691 42	21
236,660 39	1,266 50	291 96	.....	.....	.....	466 56	2,025 02	238,685 41	22
265,249 58	500 00	793 36	5,658 63	.....	.....	.....	6,951 99	272,201 57	23
3,728,162 93	.....	.....	.....	.....	.....	36,974 54	36,974 54	3,765,137 47	24
108,716 72	500 00	.....	.....	.....	.....	.....	500 00	109,216 72	25
.....	.....	.....	.....	.....	.....	.....	.....	.....	26
131,916 17	711 00	260 00	.....	29 42	597 43	.....	1,597 85	133,514 02	27
230,687 39	.....	63 60	45 00	.....	.....	903 77	1,017 37	231,704 76	28
53,884 90	100 00	266 00	106 52	.....	223 75	788 84	1,485 11	55,370 01	29
624,537 36	3,432 18	700 00	.....	.....	1,995 00	13,436 18	19,563 36	644,100 72	30
28,270 66	200 00	.....	.....	.....	.....	275 44	475 44	28,746 10	31
101,787 14	467 44	.....	.....	.....	728 59	427 48	1,623 51	103,410 65	32
287,494 27	.....	.....	.....	.....	.....	.....	.....	287,494 27	33
140,195 40	.....	476 21	.....	.....	.....	10,714 44	11,190 65	151,386 05	34
160,224 86	574 99	.....	.....	.....	10,950 00	.....	11,524 99	171,749 85	35
37,674 71	237 50	370 00	.....	.....	.....	1,982 15	2,589 65	40,264 36	36
30,841 38	335 00	.....	.....	.....	.....	.....	335 00	31,176 38	37
92,058 37	554 30	.....	.....	.....	216 66	36 50	807 46	92,865 83	38
163,079 78	670 00	.....	.....	.....	.....	.....	670 00	163,749 78	39
29,493 30	150 00	.....	.....	.....	6 00	.....	156 00	29,649 30	40
16,743 23	315 00	.....	1,200 00	.....	.....	432 35	1,947 35	18,690 58	41
96,811 99	300 00	.....	.....	.....	.....	454 66	754 66	97,566 65	42
3,705,229 01	12,356 00	2,869 17	.....	.....	.....	29,829 54	45,054 71	3,750,283 72	43
39,076 06	266 65	.....	.....	.....	1,404 89	218 41	1,889 95	40,966 01	44
328,918 76	625 00	734 25	.....	.....	.....	3,310 42	4,669 67	333,588 43	45
83,946 03	.....	400 00	56 00	.....	.....	871 03	1,327 03	85,276 06	46
1,003,624 86	4,989 50	.....	.....	.....	.....	.....	4,989 50	1,008,614 36	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	48
14,611,484 09	39,507 66	19,874 41	9,728 75	10,040 29	28,823 32	105,478 03	213,452 46	14,824,936 55	

ELECTRIC

TABLE 5.—SUMMARY of Operating Expenses

Number.	1	2	3	4	5
	Name of Railway.	MAINTENANCE—WAY AND STRUCTURES.			
		Maintenance of Track and Roadway.	Maintenance of Electric Line.	Maintenance of Buildings and Fixtures.	Total Way and Structures.
		$ cts.	$ cts.	$ cts.	$ cts.
1	Berlin and Waterloo	.....	.....	.....	1,355 54
2	Leased Line—Berlin and Bridgeport	143 44	3 98	40 47	187 89
3	Brantford and Hamilton Electric	3,901 68	1,620 35	46 26	5,568 29
4	British Columbia	53,290 64	11,322 37	15,012 32	79,625 33
5	Cape Breton	2,124 56	1,204 28	454 16	3,783 00
6	Chatham, Wallaceburg and Lake Erie	954 07	411 15	209 48	1,574 70
7	Cornwall Street	1,637 00	166 85	.....	1,803 85
8	Egerton Tramway Co., N.S., now Pictou County Electric	2,169 59	297 83	71 59	2,539 61
9	Galt, Preston and Hespeler	9,276 60	877 88	411 62	10,566 10
10	Leased Line—Preston to Berlin	.....	.....	.....	.....
11	Grand Valley	4,467 23	908 54	.....	5,375 77
12	Guelph Radial	1,236 12	272 98	.....	1,509 10
13	Halifax Tramway	6,265 62	1,824 84	2,229 54	10,320 00
14	Hamilton and Dundas	2,926 98	605 47	9 17	3,541 62
15	Hamilton, Grimsby and Beamsville	10,524 05	1,523 02	200 20	12,247 27
16	Hamilton Radial	9,436 30	1,145 33	217 84	10,799 47
17	Hamilton Street	8,025 72	2,543 56	867 98	11,437 26
18	Hull	8,191 27	2,312 75	386 88	10,890 90
19	International Transit Co.	1,133 41	271 81	191 27	1,596 49
20	Kingston, Portsmouth and Cataraqui	1,844 74	358 28	.....	2,203 02
21	Levis County	2,555 29	560 99	240 83	3,357 11
22	London Street	13,016 07	2,220 54	633 05	15,869 66
23	Montreal Park and Island	21,843 69	2,579 39	2,565 19	26,988 27
24	Montreal Street	.....	.....	.....	110,642 77
25	Montreal Terminal	11,494 92	2,069 23	939 31	14,503 46
26	Nelson Tramway	.....	.....	.....	.....
27	Niagara Falls Park and River	3,249 30	2,706 48	741 29	6,697 07
28	Niagara, St. Catharines and Toronto	15,584 69	2,398 46	1,783 30	19,766 45
29	Oshawa	4,015 75	240 18	547 20	4,803 13
30	Ottawa	13,749 95	7,304 32	2,400 34	23,454 61
31	Peterborough Radial	1,749 25	118 39	.....	1,867 64
32	Port Arthur Street	.....	.....	.....	.....
33	Quebec Ry., Light & Power Co. (Citadel)	7,085 94	3,751 72	137 98	10,975 64
34	Quebec Ry., Light & Power Co. (Montmorency)	11,095 85	2,430 15	875 91	14,401 91
35	Sandwich, Windsor and Amherstburg	9,480 81	3,704 90	798 94	13,985 65
36	Sarnia	1,384 47	23 00	.....	1,407 47
37	Sherbrooke Street	3,443 27	560 00	900 00	4,903 27
38	South-western Traction Co.	7,638 04	586 99	.....	8,225 03
39	St. John	14,250 33	1,582 95	407 61	16,240 89
40	St. Stephen, N.B.	2,816 96	380 02	152 81	3,349 79
41	St. Thomas Street	1,408 17	399 29	.....	1,807 46
42	Sydney and Glace Bay	3,464 59	2,002 74	102 67	5,570 00
43	Toronto Street	54,921 29	21,506 69	14,029 68	90,457 66
44	Toronto Suburban	2,907 04	1,324 75	58 11	4,289 90
45	Toronto and York Radial	22,458 68	2,175 83	529 53	25,164 04
46	Windsor, Essex and Lake Shore Rapid	5,363 16	1,893 26	271 95	7,528 37
47	Winnipeg Street	24,120 01	4,056 79	1,776 84	29,953 64
48	Yarmouth Street	.....	.....	.....	.....
	Total	386,646 54	94,249 33	50,241 32	643,135 50

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RAILWAYS.

for the Year ending June 30, 1909.

6	7	8	9	10	11	12	
MAINTENANCE—EQUIPMENT.							
Maintenance of Steam Plant.	Maintenance of Electric Plant.	Maintenance of Cars.	Maintenance of Electric Equipment of Cars.	Maintenance of Miscellaneous Equipment.	Miscellaneous Shop Expenses.	Total Equipment.	Number.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
						2,722 03	1
							2
		2,362 71	2,314 35			4,677 06	3
463 53	9,052 35	50,099 63	44,256 35	572 38	1,790 92	106,235 16	4
21 93	1,709 06	2,868 44	1,519 68	172 95	289 61	6,581 67	5
618 48	195 50	1,309 77	470 65	466 99	301 95	3,363 34	6
258 60	92 13	2,380 75	845 71			3,577 19	7
348 54		945 56	416 22	92 62		1,802 94	8
850 32	44 47	2,876 47				3,771 26	9
							10
		11,106 42				11,106 42	11
	79 07				2,121 16	2,200 23	12
1,585 74	461 87	6,343 08	7,218 65	917 67	323 88	16,850 89	13
		698 51	790 33			1,398 84	14
	229 31	4,289 08	4,051 41			8,569 80	15
		5,654 70	6,120 76			11,775 46	16
		10,556 09	13,943 72			24,499 81	17
						14,612 30	18
		1,979 15	1,678 41	104 07	364 33	4,125 96	19
107 36			1,737 49	7 11		1,851 96	20
	333 61	2,828 72	2,911 39	1,208 36	462 16	7,744 24	21
4,030 02	1,267 68	11,007 33	8,463 67	546 72	2,377 15	27,692 57	22
		10,031 21	8,496 96	445 93		18,974 10	23
						297,787 54	24
415 29		7,465 02	6,473 61	54 07		14,407 99	25
							26
139 96	31 60	5,754 43	3,312 09	129 06	146 70	9,513 84	27
632 94		5,427 62	10,401 39	734 22	641 51	17,837 68	28
353 95	537 42	2,288 72	1,810 37		193 93	5,184 39	29
	6,232 89	25,280 27	24,696 18	2,794 35		59,003 69	30
		1,585 12	938 72			2,523 84	31
							32
		12,916 87	6,927 99	158 49		20,003 35	33
	254 96	4,387 29	2,203 08		456 24	7,301 57	34
1,328 98	1,328 98	4,340 76	2,482 36	31 28		9,512 36	35
			1,626 43		1,416 65	3,043 08	36
310 00	521 00	4,158 42		650 00	430 67	6,070 09	37
295 80	196 00	2,705 85	1,063 90			4,261 55	38
2,721 91	34 86	7,839 01	6,855 41	877 65	581 97	18,710 81	39
285 29	228 95	768 24	1,911 47		112 10	3,306 05	40
	2,007 66				274 54	2,282 20	41
367 36	47 65	7,367 61	1,238 93	15 16		9,036 71	42
952 78	7,002 56	138,313 00	104,451 21	28,293 14	23,355 61	302,368 30	43
106 20	2 55	1,057 83	438 31	96 22	483 86	2,184 97	44
1,813 63	954 63	8,690 95	9,388 45	2,392 36	334 12	23,574 14	45
	3,835 98	4,275 60	5,554 64	1,068 66	940 30	15,675 18	46
		33,627 13	24,040 59	6,487 58	2,409 31	66,564 61	47
							48
18,008 61	36,682 74	405,497 36	321,050 88	48,317 04	39,603 67	1,184,287 17	

ELECTRIC

Table 5.—Summary of Operating Expenses

Number.	13	14	15	16	17
	Name of Railway.	Transportation—Operation of			
		Power Plant Wages.	Fuel for Power.	Water for Power.	Lubricants and Waste for Power Plant.
		$ cts.	$ cts.	$ cts.	$ cts.
1	Berlin and Waterloo				
2	Leased Line—Berlin and Bridgeport				
3	Brantford and Hamilton Electric	3,253 79			
4	British Columbia	13,012 22		11,7 0 91	798 85
5	Cape Breton				
6	Chatham, Wallaceburg and Lake Erie	1,605 75	7,269 38	374 01	527 42
7	Cornwall Street	1,072 18	655 55	120 00	11 62
8	Egerton Tramway Co., N.S., now Pictou County Electric	2,922 05	3,995 75	80 00	214 98
9	Galt, Preston and Hespeler	4,451 45	13,010 27		618 84
10	Leased Line—Preston to Berlin				
11	Grand Valley	4,189 80	8,948 16		312 57
12	Guelph Radial	1,539 93	3,320 78		270 34
13	Halifax Tramway	3,047 23	12,798 95	580 47	355 10
14	Hamilton and Dundas				
15	Hamilton, Grimsby and Beamsville	2,808 74			
16	Hamilton Radial				
17	Hamilton Street				
18	Hull				
19	International Transit Co				
20	Kingston, Portsmouth and Cataraqui				
21	Levis County	680 26			15 80
22	London Street	7,535 18	19,291 17	74 00	674 82
23	Montreal Park and Island				
24	Montreal Street				
25	Montreal Terminal	4,732 90	4,900 57		224 15
26	Nelson Tramway				
27	Niagara Falls, Park and River	5,182 00			132 37
28	Niagara, St. Catharines and Toronto	3,878 83	303 18	348 01	31 44
29	Oshawa	2,850 00	6,758 40		76 36
30	Ottawa	7,957 46	4,939 72	3,759 28	
31	Peterborough Radial			1,500 60	
32	Port Arthur Street				
33	Quebec Ry., Light and Power Co. (Citadel)				
34	Quebec Ry., Light and Power Co. (Montmorency)	1,006 35			
35	Sandwich, Windsor and Amherstburg	6,369 57	16,239 00	1,140 00	319 39
36	Sarnia				
37	Sherbrooke Street	1,314 00			55 00
38	Southwestern Traction Co	6,193 25	12,313 15		358 01
39	St. John	3,927 40	13,652 54		
40	St. Stephen, N. B	942 05	5,669 58	150 00	184 60
41	St. Thomas Street				
42	Sydney and Glace Bay	2,873 41	7,243 34	578 35	278 45
43	Toronto Street	19,116 90	11,084 84	371 07	94 22
44	Toronto Suburban		234 94	41 90	
45	Toronto and York Radial	10,910 09	23,232 77		1,698 98
46	Windsor, Essex and Lake Shore Rapid	3,642 40	8,857 68		1,009 12
47	Winnipeg Street				
48	Yarmouth Street				
	Total	127,015 19	184,719 72	20,818 00	8,262 43

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RAILWAYS.

for the Year ending June 30, 1909—*Continued.*

18	19		20	21	22	23	24	
Power Plant.			Transportation—Operation of Cars.					
Miscellaneous Supplies and Expenses of Power Plant.	Hired Power.	Total Operation of Power Plant.	Superintendence of Transportation.	Wages of Conductors.	Wages of Motormen.	Wages of Miscellaneous Car Service Employees.	Wages of Car House Employees.	Number.
$ cts.	$ cts.	cts.	cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.. ..	.....	6,984 49	.....	818 43	818 44	.....	.....	1
.....	.....	.....	.....	.....	.....	.....	.....	2
. . ..	17,757 12	21,010 91	1,779 74	2,788 38	2,788 38	1,933 89	1,048 09	3
1,601 94	122,238 42	149,352 34	7,260 00	165,656 49	166,542 64	13,499 25	19,670 24	4
... .	10,962 27	10,962 27	1,315 00	7,742 72	7,809 57	29 48	1,455 40	5
527 23	.. ..	10,303 79	....	2,924 16	2,942 93	96 21	416 45	6
....	.....	1,859 35	....	4,679 97	4,679 97	.....	769 24	7
55 91	.....	7,268 69	2,400 00	3,301 98	3,224 34	226 59	2,296 23	8
.....	.....	18,080 56	1,509 00	5,880 60	5,745 36	1,874 47	3,016 18	9
....	.....	.....	.....	.....	.....	.....	.....	10
9,449 04	.....	22,899 57	....	8,360 15	8,360 15	.....	.....	11
.....	.....	5,131 05	... .	3,775 18	3,775 18	221 24	1,968 72	12
3,013 21	... .	17,794 96	1,200 00	20,231 63	20,231 62	2,868 24	2,058 13	13
.....	4,173 27	4,173 27	694 16	2,943 92	2,943 93	697 06	272 16	14
.....	11,438 07	14,246 81	1,515 38	4,431 64	4,431 61	4,341 99	821 60	15
.. ..	14,8[illegible]5 09	14,895 09	2,555 99	8,6[illegible]3 41	8,653 42	2,547 07	1,940 85	16
.....	42,890 24	42,890 24	5,441 95	36,480 65	36,480 65	....	4,280 59	17
.....	7,988 30	7,988 30	....	11,076 92	11,076 93	.....	.....	18
.....	7,000 00	7,000 00	300 00	5,654 33	5,656 45	1,494 60	1,212 68	19
.. ..	4,689 73	4,680 73	.. ..	3,741 83	3,683 79	.. ..	2,340 97	20
....	8,978 75	9,674 81	.....	7,424 94	7,487 13	992 50	1,251 61	21
791 26	.. ..	28,366 43	2,440 00	28,677 10	28,701 87	1,211 52	2,067 60	22
.....	48,863 22	48,863 22	3,665 00	16,935 96	16,347 79	5,885 48	2,605 42	23
.....	.....	385,174 12	.....	.....	.....	.....	.....	24
24 60	1.500 00	11,382 22	1.871 41	14,225 57	13,979 71	3,289 27	3,396 13	25
....	.....	.....	.....	.....	.....	.....	.....	26
675 10	255 00	6,244 47	2,494 92	8,819 31	8,830 68	860 53	2,114 46	27
494 93	11,364 20	16,420 59	.....	28,590 10	28,590 09	.....	.....	28
270 00	2,148 09	12,102 85	1,461 30	2,413 44	2,645 06	6,044 35	....	29
2,571 52	18,240 22	37,468 20	4,812 40	81,507 51	81,507 51	29,934 81	10,041 90	30
. ...	... .	1,500 00	780 00	5,600 29	5,600 29	537 63	626 00	31
....	13,059 80	13,059 80	.....	.....	.....	.....	.....	32
... .	14,085 62	14,085 62	6,000 00	40,679 25	40,679 25	2,374 20	3,883 84	33
....	4,001 26	5,007 61	1,664 78	9,441 39	7,452 80	18,359 18	796 93	34
640 49	4,366 03	29,074 48	886 46	17,144 43	17,144 46	396 48	2,178 23	35
... .	5,591 45	5,591 45	....	4,067 37	4,067 37	.....	.....	36
40 00	.....	1,409 66	500 00	3,800 00	3,800 00	200 00	1,880 00	37
560 77	....	19,425 18	897 30	5,065 12	5,161 69	3,154 00	1,350 91	38
1,413 20	.....	18,993 14	2,835 00	25,074 40	25,074 40	. . ..	.....	39
....	.....	6,946 23	355 00	2,743 80	2,715 80	....	2,113 40	40
... .	3,944 40	3,944 40	....	4,974 26	4,974 26	.....	2,058 66	41
192 99	4,878 48	16,045 02	320 00	5,373 83	5,407 89	408 81	680 00	42
3,473 56	243.655 60	277.796 19	46,836 54	395,277 41	368,767 83	.....	194,821 24	43
.....	4,962 10	5,238 94	600 00	4,471 68	4,471 69	..... .	2,137 31	44
1,383 37	11,303 56	48,528 77	4,175 00	15,857 53	15,857 54	11.205 96	4,091 02	45
945 37	... .	14,454 57	1,540 00	3,639 92	3,639 92	1,296 00	7,351 54	46
....	40,907 34	40,907 34	20,378 25	150,357 60	147,252 35	4,518 90	18,338 03	47
....	....	.....	.....	.....	.....	.. ..	....	48
26,124 49	686,128 63	1.445,227 07	130,475 58	1,181,244 60	1,150,002 77	121,009 71	307,351 76	

TABLE 5.—SUMMARY of Operating Expenses

Number.	25	26	27	28
	NAME OF RAILWAY.	TRANSPORTATION—		
		Car Service Supplies.	Miscellaneous Car Service Supplies.	Hired Equipment.
		$ cts.	$ cts.	$ cts.
1	Berlin and Waterlooo			
2	Leased Line—Berlin and Bridgeport			
3	Brantford and Hamilton Electric	966 07	2,352 60	1,033 15
4	British Columbia	18,225 16	11,766 87	
5	Cape Breton	225 39	1,000 99	
6	Chatham Wallaceburg and Lake Erie	357 81	384 65	400 40
7	Cornwall Street			
8	Egerton Tramway Co., N.S., now Pictou County Electric	384 99	54 82	
9	Galt, Preston and Hespeler		865 66	
10	Leased Line—Preston to Berlin			
11	Grand Valley			
12	Guelph Radial		158 00	
13	Halifax Tramway	1,905 04	406 10	
14	Hamilton and Dundas	555 05	1,258 48	2,296 61
15	Hamilton, Grimsby and Beamsville	1,013 02	2,252 70	1,427 18
16	Hamilton Radial	1,329 17	3,162 14	3,709 38
17	Hamilton Street	2,338 67	10,727 36	1,018 29
18	Hull	804 61	647 42	
19	International Transit Co	161 06	238 67	
20	Kingston, Portsmouth and Cataraqui			
21	Levis County	287 50	911 53	3,291 99
22	London Street	1,793 85	2,065 47	
23	Montreal Park and Island			3,796 19
24	Montreal Street			
25	Montreal Terminal			
26	Nelson Tramway			
27	Niagara Falls, Park and River	209 82	3,099 54	189 53
28	Niagara, St. Catharines and Toronto	1,077 77	2,781 29	8,008 25
29	Oshawa	341 06	1,388 35	787 43
30	Ottawa			
31	Peterborough Radial		265 85	
32	Port Arthur Street			
33	Quebec Ry., Light and Power Co. (Citadel)	781 96	7,724 93	
34	Quebec Ry., Light and Power Co. (Montmorency)	2,128 82	3,251 79	
35	Sandwich, Windsor and Amherstburg	715 93	3,167 27	
36	Sarnia			
37	Sherbrooke Street			
38	Southwestern Traction Co	1,619 58	1,242,81	
39	St. John		8,644 58	
40	St. Stephen, N.B	15 10		
41	St. Thomas Street			
42	Sydney and Glace Bay	256 06	1,241 30	
43	Toronto Street			
44	Toronto Suburban	221 30	255 28	
45	Toronto and York Radial	2,276 85	4,387 59	
46	Windsor, Essex and Lake Shore Rapid	376 60	236 54	
47	Winnipeg Street	13,344 91		
48	Yarmouth Street			
	Total	53,713 15	75,940 59	25,988 40

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RAILWAYS.

for the Year ending June 30, 1909—*Continued.*

29	30	31	32	33	34	35	36	
Operation of Cars—*Continued.*			General.					
Cleaning and Sanding Track.	Removal of Snow and Ice.	Total Operation of Cars.	Salaries of General Officers.	Salaries of Clerks.	Printing and Stationery.	Miscellaneous Office Expenses.	Store Expenses.	Number.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
.....	.....	5,898 98	.....	.....	.....	.....	.....	1
.....	17 50	1,654 37	115 00	538 00	37 65	.....	.....	2
.....	1,235 84	15,926 14	1,556 25	3,973 44	722 33	.....	.....	3
1,429 08	.....	404,049 73	22,695 93	40,984 03	4,396 66	6,566 22	3,548 92	4
157 16	470 48	20,206 19	3,662 94	2,331 68	521 69	388 56	161 73	5
3 25	83 50	7,609 36	1,431 35	352 00	464 63	212 83	1 42	6
581 95	.....	10,711 13	1,041 67	.....	122 65	447 07	1,420 43	7
230 43	224 58	12,343 97	900 00	306 49	39 00	29 50	.....	8
.....	586 58	19,468 85	2,307 16	6,383 35	493 41	511 72	.....	9
.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	16,720 30	2,638 82	3,395 04	.....	568 86	.....	11
.....	.....	9,898 32	1,060 00	392 50	266 58	94 07	.....	12
416 00	1,951 01	51,267 77	2,200 00	1,109 00	413 00	427 05	323 88	13
.....	354 31	11,925 68	823 69	2,407 59	269 39	.....	.....	14
.....	430 17	20,665 32	1,557 88	4,521 78	816 68	.....	.....	15
.....	875 85	33,427 28	1,942 00	5,104 47	917 60	.....	.....	16
.....	2,040 08	98,938 24	5,455 37	10,272 73	844 93	.....	.....	17
.....	3,260 91	26,866 79	2 400 00	2,439 86	425 51	569 58	.....	18
1 40	106 51	14,825 70	1,005 32	1,435 56	132 95	80 06	.....	19
.....	442 98	10,209 57	1,818 75	.....	220 27	315 92	.....	20
445 05	6,025 81	28,118 06	2,357 62	1,295 00	116 54	95 28	.....	21
791 06	958 70	68,707 17	4,399 92	1,297 57	313 14	384 11	600 00	22
1,676 37	8,015 97	58,928 18	14,052 85	2,120 55	1,014 90	1,195 61	.....	23
.....	.....	1,152,952 68	.....	.....	.....	.....	.....	24
1,769 12	9,915 53	48,446 74	100 00	827 95	104 40	771 30	.....	25
.....	.....	.....	.....	.....	.....	.....	.....	26
380 82	738 81	27,738 42	1,530 89	1,068 94	170 12	124 09	216 93	27
383 51	1,530 00	70,961 01	5,961 45	3,173 10	1,567 02	5,283 50	316 73	28
.....	.....	15,680 99	2,907 20	300 00	234 47	83 78	.....	29
.....	15,583 04	223,387 17	10,000 00	4,841 31	1,228 65	923 11	460 00	30
.....	133 17	13,543 23	1,584 99	1,008 00	.....	259 86	.....	31
.....	.....	.....	.....	.....	.....	.....	.....	32
4,080 06	19,592 65	125,796 08	3,561 01	1,300 00	1,860 20	6,224 87	600 00	33
.....	4,360 74	47,456 43	2,118 60	2,545 56	1,769 57	1,255 59	887 48	34
.....	.....	41,633 26	2,600 00	1,081 50	146 39	207 84	.....	35
.....	.....	8,134 74	2,182 00	468 00	291 44	376 00	.....	36
350 00	1,650 00	12,180 00	1,500 00	444 00	101 30	30 00	517 10	37
.....	61 54	18,492 95	3,270 00	967 30	514 03	606 91	.....	38
.....	10,049 50	71,677 88	1,873 36	3,509 00	629 32	.....	.....	39
.....	572 15	8,515 25	1,845 00	165 00	6 25	98 73	.....	40
.....	.....	12,007 18	960 00	420 00	102 13	.....	.....	41
142 81	319 11	14,149 81	3,233 29	1,301 40	302 49	312 70	550 13	42
5,650 79	4,229 07	1,015,582 88	21,304 18	31,987 26	4,823 58	.....	9,327 48	43
509 35	212 10	12,878 71	1,500 00	1,597 11	29 60	128 70	.....	44
.....	3,619 12	61,470 61	5,500 00	1,964 75	1,090 69	908 88	.....	45
.....	506 97	18,587 49	1,481 12	.....	635 90	.....	.....	46
7,705 49	.....	361,895 53	3,230 00	4,582 32	.....	2,940 23	1,201 72	47
.....	.....	.....	.....	.....	.....	.....	.....	48
26,703 64	100,154 28	4,331,436 14	153,665 61	154,213 14	28,157 11	32,422 53	20,133 95	

ELECTRIC

Table 5.—Summary of Operating Expenses

Number.	Name of Railway.	37	38	39	40
			General—		
			Stable Expenses.	Advertising and Attractions.	Miscellaneous General Expenses.
			$ cts.	$ cts.	$ cts.
1	Berlin and Waterloo				
2	Leased Line—Berlin and Bridgeport			89 33	409 20
3	Brantford and Hamilton Electric		281 83	579 35	1,937 87
4	British Columbia		436 15	8,492 59	12,415 88
5	Cape Breton		254 89	24 19	2,042 54
6	Chatham, Wallaceburg and Lake Erie			134 03	1,098 12
7	Cornwall Street				
8	Egerton Tramway Co., N.S., now Pictou County Electric		714 74	18 25	686 39
9	Galt, Preston and Hespeler			1,605 24	
10	Leased Line—Preston to Berlin				
11	Grand Valley				2,984 30
12	Guelph Radial			1,406 46	101 32
13	Halifax Tramway		991 61	709 28	886 40
14	Hamilton and Dundas		44 10	357 52	877 21
15	Hamilton, Grimsby and Beamsville		221 48	277 78	1,857 88
16	Hamilton Radial		174 78	442 64	2,206 61
17	Hamilton Street			4,567 77	2,877 75
18	Hull			382 53	2,421 16
19	International Transit Co			20 13	1,086 41
20	Kingston, Portsmouth and Cataraqui			4,718 93	4,376 23
21	Levis County		630 26	113 45	723 20
22	London Street		394 41		2,104 61
23	Montreal Park and Island			1,227 39	
24	Montreal Street				
25	Montreal Terminal			893 11	
26	Nelson Tramway				
27	Niagara Falls, Park and River		71 76	2,034 17	777 74
28	Niagara, St. Catharines and Toronto		80 52	3,061 28	979 55
29	Oshawa			81 08	50 62
30	Ottawa			16,089 51	2,935 25
31	Peterborough Radial			1,190 39	168 14
32	Port Arthur Street				52,926 36
33	Quebec Ry., Light and Power Co. (Citadel)		432 00	309 00	2,274 33
34	Quebec Ry., Light and Power Co. (Montmorency)			1,335 38	15,604 35
35	Sandwich, Windsor and Amherstburg		398 00	1,314 51	767 52
36	Sarnia		1,161 01	59 45	4,960 64
37	Sherbrooke Street		91 12	210 00	3,547 84
38	Southwestern Traction Co			519 49	1,205 23
39	St. John		1,639 67	1,186 65	
40	St. Stephen, N.B				160 02
41	St. Thomas Street				
42	Sydney and Glace Bay			45 30	808 62
43	Toronto Street		2,267 06	172 72	12,611 77
44	Toronto Suburban			5 40	437 03
45	Toronto and York Radial		6,773 99	1,678 66	3,949 21
46	Windsor, Essex and Lake Shore Rapid				265 95
47	Winnipeg Street				5,875 83
48	Yarmouth Street				
	Total		17,059 38	55,343 96	151,399 58

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RAILWAY.

for the Year ending June 30, 1909 —*Continued.*

41	42	43	44	45	46	47	48	

Continued.

Damages.	Legal Expenses in Connection with Damages.	Miscellaneous Legal Expenses.	Rent of Land and Buildings.	Rents of Track and Terminals.	Insurance.	Total General.	Total Operating Expenses.	Number.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
						5,836 67	22,797 71	1
			100 00	1,540 97	208 29	3,038 44	4,880 70	2
1,871 39	132 58		101 00	4,821 75	506 03	16,483 82	63,666 22	3
26,856 98		3,355 95		12,666 70	13,886 88	156,302 89	895,565 45	4
1,230 70		698 12	221 04		873 34	12,411 42	53,944 55	5
983 40	500 00	250 00	25 00	79 55		5,532 33	28,383 52	6
1,623 28	101 00				1,207 83	5,963 93	23,915 45	7
		116 29			1,761 12	4,571 78	28,526 39	8
451 50	201 11		99 96	750 00	3,500 60	16,303 45	68,190 22	9
								10
740 00		615 27	1,400 55	752 20	953 55	14,048 59	70,150 65	11
			23 50	372 92	326 30	4,043 65	22,782 35	12
1,900 00	414 00	467 30			2,710 80	12,552 32	108,785 94	13
2,083 42		410 80		3,677 78	126 58	11,078 08	32,117 49	14
2,364 67	978 17		372 00	5,272 27	603 64	18,844 23	74,573 43	15
3,919 57	744 39			8,403 05	1,197 70	25,052 81	95,950 11	16
13,666 01	2,665 63		3,179 89		2,461 58	45,991 66	223,657 21	17
2,488 30				3,469 12	1,580 24	16,176 30	76,534 59	18
		314 63	1 00		812 57	4,888 63	32,436 78	19
205 18						11,655 28	30,600 56	20
252 87	10 00	95 69	13 00	1,200 00	3,398 84	10,301 80	59,196 02	21
9,436 14		756 74	6 60		2,165 00	21,857 64	162,493 47	22
9,297 93		2,210 35			2,376 63	33,496 21	187,249 98	23
						240,633 19	2,187,190 30	24
4,523 57		1,657 22			1,230 78	10,108 33	98,848 74	25
								26
931 38	216 19	580 34	239 47	10,000 00	2,159 48	20,121 50	70,315 30	27
1,073 92	17 55	1,702 39		995 12	6,736 62	30,948 75	155,934 48	28
					298 74	3,955 89	41,727 25	29
28,991 49		185 07			8,513 40	74,167 79	417,481 46	30
37 50	255 70				1,061 72	5,566 30	25,001 01	31
						52,926 86	65,986 66	32
340 95	3,646 06		480 00		4,628 98	25,648 40	196,509 09	33
24 76		216 39		129 81	4,191 86	30,079 35	104,246 87	34
	402 10		180 00		900 60	7,997 86	102,203 61	35
230 80	128 82				1,012 33	10,870 49	29,047 23	36
1,200 00	80 00	25 00	5 00		286 00	8,031 36	32,593 72	37
48 74		115 33		1,200 00	1,666 07	10,113 10	60,517 81	38
	8,152 48				3,099 94	20,090 42	145,713 14	39
27 75	500 00	551 50			1,008 54	4,362 79	26,480 11	40
			1 00		711 00	2,194 13	22,235 37	41
5,898 12		857 98	969 26		1,444 38	15,723 67	60,525 21	42
73,505 93		8,765 76	1,707 72	17,755 94		184,229 40	1,870,434 43	43
39 50	1 37	516 17	310 38		989 78	5,555 04	30,147 56	44
5,631 73		1,550 00	5,352 43		3,044 83	37,445 17	196,182 73	45
		750 00	840 00		1,600 04	5,573 01	61,818 62	46
						17,830 10	517,151 22	47
								48
201,877 48	19,147 15	26,764 29	15,628 20	73,087 18	85,235 41	1,280,604 83	8,884,690 71	

TABLE 6.—SUMMARY Statement of Description of Equipment for the Year ending June 30, 1909.

Number.	1	2	3	4	5	6	7	8	9	10	11	12	13
	Name of Railway.	Passenger Cars.				Other Cars.							
		Closed Passenger Cars.	Open Passenger Cars.	Combination, Closed and Open Passenger Cars.	Total Passenger Cars.	Freight Cars.	Mails, Express and Baggage Cars.	Combination Cars.	Work Cars.	Snow Ploughs.	Sweepers.	Miscellaneous Cars.	Total Cars of all Classes.
		No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1	Berlin and Waterloo	8	4		12				1	1	1		15
2	Leased Line—Berlin and Bridgeport												
3	Brantford and Hamilton Electric	6			6								6
4	British Columbia	138		11	149	27	4		9	4	2	53	248
5	Cape Breton	9			9					2	1		12
6	Chatham, Wallaceburg and Lake Erie	5			5	17							22
7	Cornwall Street	7	3		10	2					1		13
8	Egerton Tramway Co., N.S., now Picton Co. Electric	5			5	1			1	2			9
9	Galt, Preston and Hespeler	7	4		11	6		2	1		1	1	22
10	Leased Line—Preston to Berlin												
11	Grand Valley	11	16		27					1			28
12	Guelph Radial	5	5	2	12	1			1	1			15
13	Halifax Tramway	20	24	2	46						4		50
14	Hamilton and Dundas	2	2		4								4
15	Hamilton, Grimsby and Beamsville	8	3		11	4			3				18
16	Hamilton Radial	9	6		15	2				2	1		20
17	Hamilton Street	45	27		72				1		2		75
18	Hull	16	13		29		1		1	2	2	2	37
19	International Transit Co	8			8						1		9
20	Kingston, Portsmouth and Cataraqui	11	12		23	1				2			26
21	Levis County	13	8		21		1		2	1	3		28
22	London Street	39	14		53					1	1	3	58
23	Montreal Park and Island	9	16	10	35	1			6	4	2		48
24	Montreal Street	517	272	75	864	48			15	4	26		957
25	Montreal Terminal	14	23		37	2			2	3	1		45

26	Nelson Tramway												
27	Niagara Falls Park and River	9	18		27			2	2	1		6	38
28	Niagara, St. Catharines and Toronto	16	16		32	14			3	2		6	57
29	Oshawa	4	3		7	1		1	2	1		3	15
30	Ottawa	88	72		160		3		3	4	10		180
31	Peterborough Radial	8	6		14					1	1		16
32	Port Arthur Street	13	3	1	17					1			18
33	Quebec Railway, Light and Power Co. (Citadel)	40	40		80					2	6	1	89
34	" " " " (Montmorency)	13			13								13
35	Sandwich, Windsor and Amherstburg	20	16		36		3		3	1			43
36	Sarnia	9	2		11		1						12
37	Sherbrooke Street	6	9		15					1			16
38	Southwestern Traction Co	12			12	9				1			22
39	St. John	25	26		51				1	2	4		58
40	St. Stephen, N.B	3	4		7				1	1			9
41	St. Thomas Street	6	10		16					1			17
42	Sydney and Glace Bay	10			10	3				1			14
43	Toronto Street	299	295	236	830	4			5		16	9	864
44	Toronto Suburban	8	4		12	1			1		1		15
45	Toronto and York Radial	33	4		37		7		8	3		1	56
46	Windsor, Essex and Lake Shore Rapid	5	4		9	8		2				1	20
47	Winnipeg Street	150	33		183				13	1	3	7	207
48	Yarmouth Street												
	Total	1,689	1,017	337	3,043	152	20	7	85	54	90	93	3,544

ELECTRIC RAILWAYS—*Concluded.*

TABLE 7.—SUMMARY STATEMENT of Accidents for the Year ending June 30, 1909.

Number.	1	2	3	4	5	6	7	8	9	10	11	12	13
	NAME OF RAILWAY.	PASSENGERS.			EMPLOYEES.			OTHERS.			TOTALS.		
		Killed.	Injured.	Total.	Killed.	Injured.	Total.	Killed.	Injured.	Total.	Killed.	Injured.	Total Accidents.
		No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1	Berlin and Waterloo												
2	Leased line—Berlin and Bridgeport												
3	Brantford and Hamilton Electric		10	10		6	6	1	20	21	1	36	37
4	British Columbia		74	74	4	12	16	5	43	48	9	129	138
5	Cape Breton							1	2	3	1	2	3
6	Chatham, Wallaceburg and Lake Erie	4	15	19		3	3				4	18	22
7	Cornwall Street												
8	Egerton Tramway Co., now Picton County Electric												
9	Galt, Preston and Hespeler					2	2	1		1	1	2	3
10	Leased line—Preston to Berlin												
11	Grand Valley												
12	Guelph Radial												
13	Halifax Tramway		11	11		2	2	1		1	1	13	14
14	Hamilton and Dundas		11	11		1	1	1	8	9	1	20	21
15	Hamilton, Grimsby and Beamsville		18	18		4	4		7	7		29	29
16	Hamilton Radial		16	16	1	4	5	1	25	26	2	45	47
17	Hamilton Street		178	178		32	32	2	133	135	2	343	345
18	Hull		3	3				1	3	4	1	6	7
19	International Transit Co												
20	Kingston, Portsmouth and Cataraqui								2	2		2	2
21	Levis County		5	5		1	1					6	6
22	London Street		30	30		7	7	1	20	21	1	57	58
23	Montreal Park and Island		3	3		1	1	1	5	6	1	9	10
24	Montreal Street		293	293		17	17	17	261	278	17	571	588
25	Montreal Terminal		1	1					6	6		7	7
26	Nelson Tramway												
27	Niagara Falls Park and River		2	2		2	2	1	2	3	1	6	7
28	Niagara, St. Catharines and Toronto				1		1				1		1
29	Oshawa					4	4	1		1	1	4	5

30	Ottawa		2	2		8	8	2	28	30		38	40
31	Peterborough Radial					1	1					1	1
32	Port Arthur Street					2	2					2	2
33	Quebec Railway, Light and Power Co. (Citadel)		42	42		14	14					56	56
34	Quebec Railway, Light and Power Co. (Montmorency)		3	3		1	1		2	2		6	6
35	Sandwich, Windsor and Amherstburg		2	2					2	2		4	4
36	Sarnia												
37	Sherbrooke Street					1	1					1	1
38	Southwestern Traction Co.							1		1	1		1
39	St. John		16	16		1	1	1	2	3	1	19	20
40	St. Stephen, N. B.												
41	St. Thomas Street												
42	Sydney and Glace Bay		1	1					1	1		2	2
43	Toronto Street	6	532	538		88	88	7	17	24	13	637	650
44	Toronto Suburban		2	2		1	1					3	3
45	Toronto and York Radial		3	3		1	1	1	9	10	1	13	14
46	Windsor, Essex and Lake Shore Rapid		1	1	1		1	2	3	5	3	4	7
47	Winnipeg Street	1	29	30		2	2	1	17	18	2	48	50
48	Yarmouth Street												
	Total	11	1,303	1,314	7	218	225	50	618	668	68	2,139	2,207

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FOURTH REPORT

OF THE

BOARD OF RAILWAY COMMISSIONERS FOR CANADA

FOR THE YEAR ENDING MARCH 31

1909

PRINTED BY ORDER OF PARLIAMENT

OTTAWA
PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1909

[No. 20c—1910.]

BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Hon. J. P. Mabee, Chief Commissioner.

D'Arcy Scott, Assistant Chief Commissioner.

Hon. M. E. Bernier, Deputy Chief Commissioner.

Jas. Mills, Commissioner.

S. J. McLean, Commissioner.

A. D. Cartwright, *Secretary.*

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REPORT

OF THE

BOARD OF RAILWAY COMMISSIONERS FOR CANADA

OTTAWA, March 31, 1909.

To His Excellency the Governor in Council.

Pursuant to the provisions of section 62 of the Railway Act, the Board of Railway Commissioners for Canada has the honour to submit its fourth report for the year ending March 31, 1909.

Since the submission of the Board's last report, the Railway Act has been amended in certain important particulars under and by virtue of chapter 61-7-8, Edward VII., entitled 'An Act to amend the Railway Act with respect to telegraphs and telephones and the jurisdiction of the Board of Railway Commissioners'; and also by chapter 62-7-8, Edward VII. of the Dominion statutes, entitled 'An Act to amend the Railway Act with respect to the constitution of the Board of Railway Commissioners.'

The following are the amendments above referred to:—

7-8 EDWARD VII.

Chap 61.

An Act to amend the Railway Act with respect to Telegraphs and Telephones and the jurisdiction of the Board of Railway Commissioners.

Assented to 20th July, 1908.

His Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

PART I.

1. In this part, unless the context otherwise requires.—

(*a*) 'Board' means the Board of Railway Commissioners of Canada;

(*b*) 'company' means a railway company or person authorized to construct or operate a railway, having authority to construct or operate a telegraph or telephone system or line, and to charge telegraph or telephone tolls, and includes also telegraph and telephone companies and every company and person within the legislative

authority of the Parliament of Canada having power to construct or operate a telegraph or telephone system or line, and to charge telegraph or telephone tolls;

(*c*) 'special Act' means any Act under which the company has authority to construct or operate a telegraph or telephone system or line, or which is enacted with special reference to any such system or line, and any letters patent constituting a company's authority to construct or operate a telegraph or telephone system or line, granted under any Act, and the Act under which such letters patent were granted, and includes The Telegraphs Act and any general Act relating to telegraphs or telephones;

(*d*) 'telegraph' includes wireless telegraph;

(*e*) 'telegraph toll' means and includes any toll, rate or charge to be charged by the company to the public or to any person for the transmission of messages by telegraph.

2. The board shall have jurisdiction to inquire into, hear and determine any application by or on behalf of any party interested complaining that any company or person has failed to do any act, matter or thing required to be done by The Railway Act or this Part or the special Act, or by any regulation, order or direction made thereunder by the Governor in Council, the Minister, the Board or any other authority, or that any company or person has done or is doing any act, matter or thing contrary to or in violation of The Railway Act or this Part or the special Act, or any such regulation, order or direction, or requesting the Board to make any order, or give any direction, sanction or approval which by law it is authorized to make or give, or with respect to any matter, act or thing which by The Railway Act or this Part or the special Act or by any such regulation, order or direction is prohibited, sanctioned or required to be done.

2. The Board may order and require any company or person to do forthwith, or within or at any specified time, and in any manner prescribed by the Board, so far as is not inconsistent with The Railway Act or this Part or the special Act, any act, matter or thing which such company or person is or may be required or authorized to do under the said Acts or any of them or this Part, and may forbid the doing or continuing of any act, matter or thing which is contrary to the said Acts or any of them or this Part; and shall, for the purposes of this Part, have full jurisdiction to hear and determine all matters whether of law or of fact.

3. The Board may make orders and regulations with respect to any matter, act or thing which by The Railway Act or this Part or the special Act is sanctioned or required to be done or prohibited, and generally for carrying the said Acts and this Part into effect

2. The Board may, by regulations, prescribe penalties when not prescribed by the Railway Act or this Part or the special Act, to which every company or person which or who offends against any regulation made under this section shall be liable; provided that no such penalty shall exceed one hundred dollars.

3. The imposition of any such penalty shall not lessen or affect any other liability which any company or person may have incurred.

4. Notwithstanding anything in any Act heretofore passed by Parliament, all telegraph and telephone tolls to be charged by the company shall be subject to the approval of the Board.

2. The company shall file with the Board tariffs of any telegraph or telephone tolls to be charged, and such tariffs shall be in such form, size and style and give such information, particulars and details as the Board, from time to time, by regulation, or in any particular case, prescribes, and the company shall not charge, and shall not be entitled to charge, any telegraph or telephone toll in respect of which there is default in such filing, or which is disallowed by the Board; provided that any company, previous to the first day of May, one thousand nine hundred and eight, charging telegraph or telephone tolls may, without such filing and approval, for a

period of four months after this Part comes into force, or for such further period as the Board allows, charge such telegraph or telephone tolls as such company was immediately previous to the said date authorized by law to charge, unless in the meantime the Board in the case of any company disallows any of such tolls.

3. Such telegraph and telephone tariffs may be dealt with by the Board in the same manner as is provided by The Railway Act, with respect to standard freight tariffs; and all the provisions of The Railway Act, except as to publication under section 339 thereof, applicable to companies thereunder with respect to standard freight tariffs and tolls, shall, in so far as they are applicable and not inconsistent with this Act, apply to the company with respect to such telegraph and telephone tariffs and tolls.

4. The Board may, by regulation or otherwise, determine and prescribe the manner and form in which any tariff or tariffs of telegraph or telephone tolls shall be published or kept open for public inspection.

5. When ever any company or any province, municipality or corporation, having authority to construct and operate, or to operate, a telephone system or line and to charge telephone tolls, whether such authority is derived from the Parliament of Canada or otherwise, is desirous of using any long-distance telephone system or line owned, controlled or operated by any company, in order to connect such long-distance telephone system or line with the telephone system or line operated or to be operated by such first mentioned company or by such province, municipality or corporation for the purpose of obtaining direct communication, whenever required, between any telephone or telephone exchange on the one telephone system or line and any telephone or telephone exchange on the other telephone system or line, and cannot agree with the company with respect to obtaining such use, connection or communication, such first mentioned company or province, municipality or corporation may apply to the Board for relief, and the Board may order the company to provide for such use, connection or communication, upon such terms as to compensation as the Board deems just and expedient, and may order and direct how, when, where, by whom, and upon what terms and conditions such use, connection or communication shall be had, constructed installed, operated and maintained.

6. Upon any such application the Board shall, in addition to any other consideration affecting the case, take into consideration the standards, as to efficiency and otherwise, of the apparatus and appliances of such telephone systems or lines, and shall only grant the leave applied for in case and in so far as, in view of such standards, the use, connection or communication applied for can, in the opinion of the Board, be made or exercised satisfactorily and without undue or unreasonable injury to or interference with the telephone business of the company.

7. Where the telephone system or line operated by the company is used or connected, for purposes of communication as aforesaid, with the telephone system or line operated by another company or by any such province, municipality or corporation, whether the authority of such province, municipality or corporation to construct and operate or to operate such telephone system or line is derived from the Parliament of Canada or otherwise, and whether such connection or communication has been previously or is hereafter established either by agreement of the parties or under an order of the Board, the provisions of The Railway Act with respect to joint tariffs, in so far as they are applicable and not inconsistent with this part or the special Act, shall apply to such company or companies and to such province, municipality or corporation; and the Board shall have, for the enforcement of its orders in this respect, in addition to all other powers possessed by it therefor, the power to order a discontinuance of such connection or communication between such different telephone systems or lines.

8. All contracts, agreements and arrangements between the company and any other company, or any province, municipality or corporation having authority to construct or operate a telephone system or line, whether such authority is derived from

the Parliament of Canada or otherwise, for the regulation and interchange of telephone messages or service passing to and from their respective telephone systems and lines, or for the division or apportionment of telephone tolls, or generally in relation to the management, working or operation of their respective telephone systems or lines, or any of them, or any part thereof, or of any other systems or lines operated in connection with them or either of them, shall be subject to the approval of the Board, and shall be submitted to and approved by the Board before such contract, agreement or arrangement shall have any force or effect.

5. The several provisions of The Railway Act with respect to the jurisdiction of the Board, practice and procedure upon applications to the Board, appeal to the Supreme Court or the Governor in Council, offences and penalties, and the other provisions of the said Act (except sections 9, 79 to 243, both inclusive, 250 to 289, both inclusive, 294 to 314, both inclusive, 348 to 354, both inclusive, 361 to 396, both inclusive, 405 to 431, both inclusive), in so far as reasonably applicable and not inconsistent with this part or the special Act, shall apply to the jurisdiction of the Board and the exercise thereof, created and authorized by this Act, and for the purpose of carrying into effect the provisions of this Part according to their true intent and meaning and shall apply generally to companies within the purview of this Part.

2. In and for the purposes of such application:—

(*a*) 'company' shall mean a company as above defined;

(*b*) 'railway' shall mean all property real and personal and works forming part of or connected with the telegraph or telephone system or line of the company;

(*c*) 'toll' or 'rate' shall mean telegraph or telephone toll;

(*d*) 'traffic' shall mean the transmission and other dealings with telegraphic and telephonic messages.

6. Sections 355 to 360 of The Railway Act, both inclusive, are repealed.

7. This Part shall come into force upon proclamation of the Governor in Council.

Part II.

8. The Railway Act is amended by inserting the following section immediately after section 26:—

26A. Where it is complained by or on behalf of the Crown or any municipal or other corporation or any other person aggrieved, that any company has violated or committed a breach of an agreement between the complainant and the company—or by any company that any such municipal or other corporation or person has violated or committed a breach of an agreement between the company and such corporation or person,—for the provision, construction, reconstruction, alteration, installation, operation, use or maintenance by the company, or by such municipal or other corporation or person, of any structure, appliance, equipment, works, renewals or repairs upon or in connection with the railway of the company, the Board shall hear all matters relating to such alleged violation or breach, and shall make such order as to the Board may seem, having regard to all the circumstances of the case, reasonable and expedient, and in such order may in its discretion direct the company, or such municipal or other corporation or person, to do such things as are necessary for the proper fulfilment of such agreement, or to refrain from doing such acts as constitute a violation or a breach thereof.

'2. The Board may take such steps and employ such persons as are necessary for the proper enforcement of such order, and in pursuance thereof may forcibly or otherwise enter upon, seize and take possession of the whole or part of the railway, and the real and personal property of the company, together with its books and offices, and may, until such order has been enforced, assume and take over all or any of the powers, duties, rights and functions of the directors and officers of the company, and supervise and direct the management of the company and its railway in all respects, including

the employment and dismissal of officers and servants of the company for such time as the Board continues to direct such management.

'3. Upon the Board so taking possession of the railway and property of the company, it shall be the duty of every officer and employee of the company to obey the orders of the Board or such person or persons as it places in authority in the management of any or all departments of the railway.

'4. The Board may, upon so taking possession of such railways and property, determine, receive and pay out all moneys due to or owing by the company, and give cheques, acquittances and receipts for moneys to the same extent and in as full and ample a manner as the proper officers of such company could do if no such order as aforesaid had been made.

'5. Cheques, acquittances or receipts so given by the Board shall be a defence to any action that may afterwards be brought by the company against the persons paying over the money for which such cheques, acquittances or receipts were given.

'6. The Board and the members thereof, and its officers and employees, shall not be liable to any action for any act done by them under the authority of this section.

'7. The cost and expenses of and incidental to proceedings to be taken by the Board under this section shall be in the discretion of the Board, and Board may direct by whom and to what extent they shall be paid.

'8. The certificate of the Board as to the amount of such costs and expenses shall be final.'

9. Paragraph (30) of section 2 of the said Act is repealed and the following is substituted therefor:—

'(30) 'toll' or 'rate' means and includes any toll, rate, charge or allowance charged or made either by the company, or upon or in respect of a railway owned or operated by the company, or by any person on behalf or under authority or consent of the company, in connection with the carriage and transportation of passengers, or the carriage, shipment, transportation, care, handling or delivery of goods, or for any service incidental to the business of a carrier; and includes also any toll, rate, charge or allowance so charged or made in connection with rolling stock, or the use thereof, or any instrumentality or facility of carriage, shipment or transportation, irrespective of ownership or of any contract, expressed or implied, with respect to the use thereof; and includes also any toll, rate, charge or allowance so charged or made for furnishing passengers with beds or berths upon sleeping cars, or for the collection, receipt, loading, unloading, stopping-over, elevation, ventilation, refrigerating, icing, heating, switching, ferriage, cartage, storage, care, handling or delivery of, or in respect of, goods transported, or in transit, or to be transported; and includes also any toll, rate, charge or allowance so charged or made for the warehousing of goods, wharfage or demurrage or the like, or so charged or made in connection with any one or more of the above-mentioned objects, separately or conjointly.'

10. Section 284 of the said Act is amended by adding at the end thereof the following subsection:—

'8. The Board may make regulations, applying generally or to any particular railway or any portion thereof, imposing charges for default or delay by any company in furnishing accommodation, appliances, or means as aforesaid, or in receiving, loading, carrying, unloading or delivering traffic, and may enforce payment of such charges by companies to any person injuriously affected by such default or delay; and any amount so received by any person shall be deducted from the damages recoverable or recovered by such person for such default or delay; and the Board may, by order or regulation, determine what circumstances shall exempt any company from payment of any such charges.'

11. Section 314 of the said Act is repealed and the following is substituted therefor:—

'314. The company, or the directors of the company, by by-law, or any officer of the company thereunto authorized by by-law of the company or directors, may from time to time prepare and issue tariffs of the tolls to be charged in respect of the railway owned or operated by the company, and may specify the persons to whom, the place where and the manner in which such tolls shall be paid.

'2. The tolls may be either for the whole or for any particular portion of the railway.

'3. All such by-laws shall be submitted to and approved by the Board.

'4. The Board may approve such by-laws in whole or in part, or change, alter or vary any of the provisions therein.

'5. No tolls shall be charged by the company or by any person in respect of a railway or any traffic thereon until a by-law authorizing the preparation and issue of tariffs of such tolls has been approved by the Board, nor unless otherwise authorized by this Act, until a tariff of such tolls has been filed with, and, where such approval is required under this Act, approved by, the Board; nor shall any tolls be charged under any tariff or portion thereof disallowed by the Board; nor shall the company charge, levy or collect any toll or money for any service as a common carrier, except under the provisions of this Act.

'6. The Board may, with respect to any tariff of tolls, other than the passenger and freight tariffs in this Act hereinafter mentioned, make regulations fixing and determining the time when, the places where, and the manner in which, such tariffs shall be filed, published and kept open for public inspection.'

12. Section 237 of the said Act is amended by inserting the words 'the railway be carried over or under the highway or that,' immediately after the word 'that' in the fourth line of subsection 2 of the said section, and by inserting the words 'the railway to be carried over or under the highway or' immediately after the word 'orders' in the first line of subsection 5 of the said section.

13. Section 241 of the said Act is amended by inserting the words 'by which any railway is carried over or under any highway or' immediately after the word 'structure' in the first line of the said section.

7-8 EDWARD VII.

CHAPTER 62.

An Act to amend the Railway Act as respects the constitution of the Board of Railway Commissioners.

(*Assented to July 29, 1908*).

His Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

1. Subsection 1 of section 10 of The Railway Act, chapter 37 of the Revised Statutes, 1906, is repealed and the following subsection is substituted therefor:—

'10. There shall be a commission known as the Board of Railway Commissioners for Canada, consisting of six members appointed by the Governor in Council.'

2. Subsection 5 of the said section 10 is repealed and the following is substituted therefor:—

5. One of such commissioners shall be appointed by the Governor in Council, chief commissioner, and another of them assistant chief commissioner of the Board.

(*a*) Any person may be appointed chief commissioner or assistant chief commissioner who is or has been a judge of a superior court of Canada or of any province of

Canada, or who is a barrister or advocate of at least ten years' standing at the bar of any such province.

(*b*) The chief commissioner shall be entitled to hold the office of chief commissioner, and the assistant chief commissioner the office of assistant chief commissioner or that of chief commissioner, so long as they respectively continue to be members of the Board.

(*c*) The assistant chief commissioner shall have all the powers of the chief commissioner; but such powers shall not be exercised by him except in the absence of the chief commissioner, and whenever he has acted it shall be conclusively presumed that he so acted in the absence or disability of the chief commissioner within the meaning of this section.'

3. Section 12 of the said Act is repealed and the following is substituted therefor:—

12. In case of the absence of the chief commissioner and the assistant chief commissioner, or of their inability to act, the deputy chief commissioner shall exercise the powers of the chief commissioner for him or in his stead, and in such case, all regulations, orders and other documents signed by the deputy chief commissioner shall have the like force and effect as if signed by the chief commissioner.

'2. Whenever the deputy chief commissioner appears to have acted for or instead of the chief commissioner, it shall be conclusively presumed that he so acted in the absence or disability of the chief commissioner and of the assistant chief commissioner within the meaning of this section.'

4. Section 13 of the said Act is repealed and the following is substituted therefor:—

13. Two commissioners shall form a quorum, and not less than two commissioners shall attend at the hearing of every case: Provided that

(*a*) in any case where there is no opposing party and no notice to be given to any interested party, any one commissioner may act alone for the Board; and

'(*b*) the Board, or the Chief Commissioner, may authorize any one of the Commissioners to report to the Board upon any question or matter arising in connection with the business of the Board, and when so authorized such commissioner shall have all the powers of two commissioners sitting together for the purpose of taking evidence or acquiring the necessary information for the purpose of such report, and upon such report being made to the Board, it may be adopted as the order of the Board, or otherwise dealt with as to the Board seems proper.

'2. The chief commissioner, when present, shall preside, and the assistant chief commissioner, when present, in the absence of the chief commissioner, shall preside, and in the opinion of either of them upon any question arising when he is presiding, which in the opinion of the commissioners is a question of law, shall prevail.

'3. No vacancy in the Board shall impair the right of the remaining commissioners to act.'

5. Section 15 of the said Act is repealed, and the following is substituted therefor:—

'15. No commissioner or officer of the Board shall, directly or indirectly,—

'(*a*) hold, purchase, take or become interested in, for his own behalf, any stock, share, bond, debenture or other security, of any railway company subject to this Act; or,—

'(*b*) have any interest in any device, appliance, machine, patented process or article, or any part thereof which may be required or used as a part of the equipment of railways or of any rolling stock to be used thereon.

'2. If any such stock, share, bond or other security, device, appliance, machine, patented process or article or any part thereof or any interest therein, shall come to or vest in any commissioner or officer of the Board by will or succession for his own benefit, he shall, within three months thereafter, absolutely sell and dispose of the same or his interest therein.'

6. The said Act is amended by inserting the following section immediately after section 19:—

'19A. The Board may hold more than one sitting at the same time.'

7. Section 18 of the said Act is amended by adding thereto the following subsection:—

'2. The Governor in Council, upon the recommendation of the Minister, may establish at any place or places in Canada such office or offices as are required for the Board, and may provide therefor the necessary accommodation, furnishings, stationery and equipment.'

8. Section 29 of the said Act is repealed, and the following is substituted therefor:—

'29. The Board may re-hear any application before deciding it, or may review, rescind, change, alter, or vary any order of decision made by it.'

9. Subsection 1 of section 35 of the said Act is repealed, and the following is substituted therefor:—

'35. The chief commissioner shall be paid an annual salary of ten thousand dollars, the assistant chief commissioner an annual salary of nine thousand dollars, and each of the other commissioners an annual salary of eight thousand dollars.'

10. The said Act is amended by inserting the following section immediately after section 41:—

41*a*. There shall be kept in the office of the secretary of the Board a book, to be called the agents' book, in which every railway company to which this Act in whole or in part applies, shall enter its name and the place of its head office, and the name of an agent at Ottawa and his place of business or some other proper place within Ottawa where he may be served for the company with any notice, summons, regulation, order, direction, decision, report or other document.

'2. Service on the company may be effected, unless the Board otherwise directs, by delivering the documents or a copy thereof to the person entered by the company as its agent or at its place of residence, or to any member of his household, or at his place of business, or such other place as aforesaid, to any clerk or adult person in his employ.

'3. Where at the time of attendance to serve any document the place of business or other place aforesaid is closed or no one is in attendance therein for receiving service, service of the document may be effectively made by mailing the same at any time during the same day, addressed to the agent at such place of business or other place, by registered letter, postage prepaid, and the service shall be deemed to have been effected at the time of attendance for service.

'4. Where any such company has not caused the required entry to be made in the agents' book the posting up of the document to be served in the office of the secretary of the Board shall be effective service upon the company unless the Board otherwise directs.

'5. The Board may in any case give directions that the fact of service upon an agent and the nature of the document served shall be communicated to the company by telegraph.'

11. Section 62 of the said Act is repealed and the following is substituted therefor:—

62. The Board shall within three months after the thirty-first day of March in each year, make to the Governor in Council through the Minister, an annual report, for the year next preceding the thirty-first day of March, showing briefly:—

(*a*) applications to the Board and summaries of the findings thereon under this Act;

(*b*) summaries of the findings of the Board in regard to any matter or thing respecting which the Board has acted of its own motion, or upon the request of the Minister;

(*c*) such other matters as appear to the Board to be of public interest, in connection with the persons, companies and railways, subject to this Act; and

(*d*) such matters as the Governor in Council directs.

'2. The said report shall be laid before both Houses of Parliament during the first fifteen days of the then next session of Parliament.'

PRACTICE AND PROCEDURE.

Several changes and alterations have been made in the Rules and Regulations of the Board and among the more important changes are the following:—

Rule 1 is rescinded and the following substituted therefor:—

1. Regular sittings of the Board will be held at the Court Room, Ottawa, at 10 a.m., on the first Tuesday of every month, for the hearing of matters, applications or complaints.

(*a*) In addition to its regular sittings, the Board may appoint special sittings at Ottawa or elsewhere.

7. Rule 7 is amended by adding thereto the following:—

'7. (*a*) Any party to any matter, application or complaint pending before the Board may set the same down for hearing at the next monthly sitting of the Board, upon giving at least ten days, or such shorter notice as the Board may order, to all parties interested.

(*b*) When contested matters, applications or complaints are ready for hearing, and are not at once set down by any party interested, the Secretary shall set the same down for the first sittings commencing after the expiration of ten days (or such shorter notice as the Board may order) from the date of such setting down.

(*c*) When a matter, application or complaint is set down for hearing by the Secretary, he shall give ten days' notice of hearing (or such shorter time as the Board may order) to all parties interested.'

GENERAL REGULATIONS AFFECTING HIGHWAY CROSSINGS.

1. That, unless otherwise ordered by the Board, the width of approaches to rural railway crossings over highways be twenty feet road surface on concession and main roads and sixteen feet on side and bush roads.

2. That a strong, substantial fence or railing, four feet six inches high, with a good post-cap (four inches by four inches), a middle piece of timber (1½ inches by 6 inches), and a ten-inch board firmly nailed to the bottom of the posts to prevent snow from blowing off the elevated roadway, be constructed on each side of every approach to a rural railway crossing where the height is six feet or more above the level of the adjacent ground—leaving always a clear road-surface twenty feet wide.

3. That the width of approaches to rural railway crossings made in cuttings be not less than twenty feet clear from bank to bank.

4. That, unless otherwise ordered by the Board, the planking or paving blocks or broken stone topped with crushed rock screenings, on rural railway crossings over highways (between the rails and for a width of at least eight inches on the outer sides thereof) be twenty feet long on concession and main roads and sixteen feet on side and bush roads.

The Rules and Regulations sanctioned by the Board will be found in Appendix 'H.'

PUBLIC SITTINGS OF THE BOARD.

Public Sittings of the Board between April 1, 1908, and March 31, 1909.

Province of Ontario—

Chatham—October 20, 21.
Fort William—July 21.
Grimsby—February 12, 1909.
Hamilton—October 13.
London—February 25, 1909.
Ottawa—April 9, 22, 23, 24; May 5; June 2, 4, 18, 23, 24; July 14, 15; September 1, 2, 3; October 6, 7, 8; November 3, 4, 19; December 1; January 5, 11, 12, 13, 1909; February 2, 16, 1909; March 9, 18, 1909.
Toronto—May 18, 19, 20, 21; November 10, 11, 12, 13; December 7, 8, 9, 10, 11, 14, 15, 16, 17, 18; January 14, 15, 27, 28, 1909.

Province of Quebec—

Montreal—May 12, 13; December 22, 23; January 5, 6, 7, 8, 1909.
Sherbrooke—March 19, 1909.

Province of New Brunswick—

St. John—January 18, 19.

Province of Manitoba—

Winnipeg—September 14, 15, 16, 17; February 1, 2, 3, 4, 5, 6, 8, 9, 1909; March 10, 11, 1909.

Province of Saskatchewan—

Regina—February 11, 12, 1909.
Saskatoon—September 23.

Province of Alberta—

Calgary, February 17, 18, 1909.
Edmonton—February 19, 20, 1909.
Lethbridge—March 8, 1909.
Medicine Hat—February 15, 1909.

Province of British Columbia—

Nelson—March 5, 1909.
Vancouver—February 23, 24, 25, 1909.
Victoria—February 27, 1909.
Vancouver—February 27, 1909.

The total number of public sittings was 99, at which 736 applications were heard. A list of which will be found in Appendix 'C.'

Among the more important matters dealt with by the Board at the Sittings above mentioned, special attention might be directed to the following:—

UNIFORM BILL OF LADING.

This important matter has received the further consideration of the Board and the following circular letter was sent out to the various Boards of Trade and kindred organizations, suggesting that the shippers appoint a committee to meet the committee of the carriers that adopted the contract submitted to them. The following is the circular:—

SESSIONAL PAPER No. 20c

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

OTTAWA, ONT., April 24, 1908.

Re *Bill of Lading.*

'DEAR SIR,—In March, 1905, complaint was made to this Board regarding the form of bills of lading in use by the railways and which had been temporarily approved in October, 1904. The complaint came from the Canadian Manufacturers' Association, and was afterwards supported by the Bankers' Association, by various Boards of Trade, merchants, and shippers throughout the country. After much delay, in February, 1907, a draft bill of lading was submitted by a select committee appointed by the railway companies, and this was printed and distributed among those interested in the matter, the result being that the Board received from various shippers and business parties throughout the Dominion a variety of suggestions as to changes and modifications that should be made. The Winnipeg Jobbers' and Shippers' Association submitted a form and afterwards requested that it be withdrawn. There does not appear from all the mass of correspondence and suggestions, any concerted idea of what would, from the shippers' point of view, be a fair contract; on the other hand, the proposition of the railways has been before the Board since February, 1907.

'There seems to be no reason why this matter should not be dealt with, three years having elapsed, and not much progress made. The letters and circulars from the shippers and those interested, from their standpoint, contain such divergent ideas that the matter is left in a most difficult and complicated position for the Board to deal with.

'When the question of a uniform bill of lading was before the Interstate Commerce Commission, upon the complaint of the Illinois Manufacturing Association, much the same diversity of opinion existed among the shippers, and the Commission suggested that, the matter being one for negotiation between the various conflicting interests, a joint committee of the carriers and shippers should be formed wih the view of adjusting the points in dispute. The result was that a contract was ultimately agreed upon.

'The Board is of the opinion that a similar course may produce good results in the present instance, and suggests that the shippers appoint a committee to meet the committee of the carriers that adopted the contract submitted by them. This should produce—

'First, unanimous agreement among the shippers as to what is deemed from their standpoint to be a fair contract; and

'Second, adjustment of many, if not all, of the terms of the contract.

'This circular is being sent to all the persons and associations that have corresponded with the Board upon the subject, with the suggestion that arrangements be at once made between them for the appointment of a small committee to meet, with as little delay as possible, the committee representing the railways.

'This committee of the shippers should be clothed with authority to represent all their interests; there should be a secretary to this committee, with whom correspondence with this Board may be carried on, and the delay and labour of corresponding direct with the various persons and associations saved.

'The Board will be pleased to learn that immediate steps are taken upon the above lines, to facilitate its dealing with this matter, and will grant a special sitting at any time to hear the parties interested, or deal with any counter suggestions, either from the shippers or the railways.

'Mr. W. E. Foster, of the Grand Trunk Railway Company, Montreal, is the secretary of the sub-committee representing the railway interests.

'Yours truly,

'J. P. MABEE,

'Chief Commissioner, B.R.C.'

As a result of this communication, a special committee representing the business communities; that is to say, the Boards of Trade and similar bodies throughout the Dominion, was named and after several meetings a conference was had between the representatives of the shippers and the railways in the rooms of the Canadian Manufacturers Association, Toronto, on March 22 and 23, 1909, and the Board understands that considerable progress was made towards coming to an agreement. There were, however, certain points of difference which are to be taken up on a date to be fixed in April next when it is hoped that sufficient progress will be made to enable the matter to be dealt with by a special hearing as suggested in the above circular of April 24, 1908.

PASSENGER RATES.

As stated in the report of the Board for the year ending March 31, 1909, a circular letter was sent to all the railway company's subject to the Board's jurisdiction, informing them of the order of the Board herein, and asking if they were willing to have their standard tariffs similarly reduced, and if not to file their objections with the Board. The following is the list of railways on which the maximum passenger basis is three cents per mile.

List of Railways on which Maximum Passenger Basis is Three Cents per Mile.

Bay of Quinte.
Boston & Maine.
Canadian Northern.
Canadian Northern Ontario.
Canadian, Northern, Quebec.
Canadian Pacific (East).
Canadian Pacific (West), east of Edmonton-Calgary line.
Central Ontario.
Central Vermont.
Chatham, Wallaceburg & Lake Erie.
Elgin & Havelock.
Grand Trunk (East).
Hampton & St. Martins.
Irondale, Bancroft & Ottawa.
Maine Central.
Michigan Central.
Midland Railway of Nova Scotia.
Moncton & Buctouche.
New Brunswick Coal & Railway Company.
New York Central.
Niagara, St. Catharines & Toronto.
Pere Marquette.
Quebec Railway, Light & Power Company.
St. Maurice Valley.
Salisbury & Harvey.
Schomburg & Aurora.
Tilsonburg, Lake Erie & Pacific.
Toronto, Hamilton & Buffalo.
Wabash.
Windsor, Essex & Lake Shore Rapid Railway.
Kingston & Pembroke.
New Brunswick Southern.
Grand Valley.
Brantford & Hamilton.

No further action has been taken by the Board.

COMPLAINT OF THE FREDERICTON, N.B., BOARD OF TRADE.

This was a complaint filed with the Board by the Board of Trade of the city of Fredericton, in the province of New Brunswick, complaining that the Canadian Pacific Railway Company and the Grand Trunk Railway Company of Canada were unjustly discriminating against the city of Fredericton in the rates charged on traffic originating west of Montreal, in the province of Quebec, and in favour of the city of St. John, in the province of New Brunswick, and applying for an order directing that the said discrimination be removed. The complaint was heard at a sitting of the Board held in the city of Ottawa on the 23rd of April, 1908, before the chief commissioner, the deputy chief commissioner and Commissioner Mills, in the presence of counsel for the Board of Trade, the Canadian Pacific Railway Company and the Grand Trunk Railway Company of Canada. The judgment of the Board was delivered by the chief commissioner under date of the 28th April, 1908 (for the full text of the judgment see Appendix 'D'). The judgment directed that an order should go absolving both the Intercolonial and the Grand Trunk Railway Company

of Canada from the agreement referred to as having been entered into between the Intercolonial Railway and the Grand Trunk Railway Company, and directing the Grand Trunk Railway Company to restore to Fredericton the St. John rate upon all traffic originating west of Montreal. The following is the full text of formal order of the Board, issued pursuant to the judgment of the Board:—

Order No. 4682.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Meeting at Ottawa, Tuesday, the fifth day of May, A.D., 1908.

PRESENT:

Hon. J. P. MABEE, *Chief Commissioner.*
Hon. M. E. BERNIER, *Deputy Chief Commissioner.*
JAMES MILLS, *Commissioner.*

In the matter of the complaint of the Board of Trade of the city of Fredericton, in the province of New Brunswick, hereinafter called the 'Applicant,' complaining that the Canadian Pacific Railway Company and the Grand Trunk Railway Company of Canada, hereinafter called the 'Grand Trunk,' were unjustly discriminating against the city of Fredericton in the rates charged on traffic originating west of Montreal, in the province of Quebec, and in favour of the city of St. John, in the said province of New Brunswick; and applying for an order directing that the said discrimination be removed;

Upon the hearing of counsel for the applicant, the Canadian Pacific Railway Company and the Grand Trunk, the evidence adduced, and what was alleged,—

It is Ordered, That the Intercolonial Railway and the Grand Trunk be, and they are hereby, absolved from the agreement with the Canadian Pacific Railway Company, as the result of which the rates to Fredericton on traffic from points west of Montreal were raised from two and one half cents (2½ cents) to eight cents (8 cents) per one hundred pounds above the rates on traffic from the same points to St. John, New Brunswick; and that the Grand Trunk be, and it is hereby, directed to restore to Fredericton the St. John basis of rates on traffic originating west of Montreal as aforesaid.

(Sgd.) J. P. MABEE,
Chief Commissioner,
Board of Railway Commissioners for Canada.

COMPLAINT OF THE CITY OF CHATHAM.

This was a complaint filed with the Board by the City of Chatham, in the province of Ontario, complaining that the Grand Trunk Railway Company of Canada and the Wabash Railroad Company refused to issue passenger tickets for traffic over the portions of the Grand Trunk Company's line of railway operated by both companies which were available on the trains of either company as was formerly the practice, and applying to the Board for an order directing the companies to restore this practice. The matter was the subject of considerable correspondence between the Board and the railway companies affected, and finally on May 27, 1908, the Board issued the following order:—

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA

Meeting at Ottawa, Wednesday, the twenty-seventh day of May, A.D., 1908.

PRESENT:

Hon. J. P. MABEE, *Chief Commissioner.*

Hon. M. E. BERNIER, *Deputy Chief Commissioner.*

JAMES MILLS, *Commissioner.*

In the matter of the complaint of the Council of the city of Chatham, in the province of Ontario, complaining that the Grand Trunk Railway Company of Canada and the Wabash Railroad Company refuse to issue passenger tickets for travel over the portions of the Grand Trunk Railway Company's line of railways, operated by both companies which are available on the trains of either company, as was formerly the case; and applying for an order directing the companies to restore the practice:

Upon reading the petition, and what has been alleged on behalf of the companies respectively:—

1. The Board doth order that the said companies be, and they are hereby, required to interchange passenger tickets between all stations in the province of Ontario through which the railways of both companies run passenger trains.

2. And the Board doth further order that each of the said companies account to the other for the revenue earned upon the tickets so interchanged.

(Sgd.) J. P. MABEE,
Chief Commissioner,
Board of Railway Commissioners for Canada.

INTERSWITCHING.

The matter of interswitching charges generally is one that has been under the consideration of the Board for nearly two years, during which period arguments have been presented to the Board at sittings held in Winnipeg, Lindsay and Toronto, in interswitching cases, with the object of suggesting standardization; and the Board has also had several reports from its chief traffic officer on the subject. It might here properly be remarked that by 'interswitching' is meant the local service performed in moving local cars at and above common points by one company or by another, without any reference to the transfer of through or interlining freight.

On the 15th January, 1908, by direction of the Board a circular letter was sent to a number of parties who had filed complaints with the Board and to certain of the railway companies inclosing report of the Board's chief traffic officer, dated the 18th December, 1907, together with a memorandum of judgment of the late chief commissioner, the Hon. A. C. Killam, adopted by the full Board, on the subject of interswitching, in order that the parties might have an opportunity of making any observations or suggestions on the subject they might desire to make, coupled with a statement that, on the receipt of answers, the Board would be prepared to deal with each particular case individually. In response to this circular letter a number of answers were received and the matter was set down for consideration at sittings of the Board, held in Toronto on the 18th of May, 1908. Subsequently, on the 8th of July, 1908, the Board made an order dealing with the general question of interswitching, as follows:—

Order No. 4988.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Meeting at Ottawa, Wednesday, the Eighth day of July, A.D. 1908.

PRESENT:

Hon. J. P. MABEE, *Chief Commissioner.*
Hon. M. E. BERNIER, *Deputy Chief Commissioner.*
JAMES MILLS, *Commissioner.*

In the matter of the following complaints to the Board: The Canadian Manufacturers' Association, the Huntsville Lumber Company *et al.*, against the Grand Trunk Railway Company of Canada; the W. Booth Lumber Company against the Grand Trunk Railway Company of Canada; the Winnipeg Manufacturers' Association against the Canadian Pacific Railway Company and the Canadian Northern Railway Company; W. J. Lovering against the Grand Trunk Rilway Company of Canada; Messrs. Leak and Company against the Grand Trunk Railway Company of Canada; Messrs. T. Dexter & Son against the Grand Trunk Railway Company of Canada; the Boake Manufacturing Company against the Grand Trunk Railway Company of Canada; the Peterborough Sandstone and Brick Company against the Canadian Pacific Railway Company and the Grand Trunk Railway Company of Canada; the town of Lindsay, Ont., against the Grand Trunk Railway Company of Canada and the Lindsay, Bobcaygeon and Pontypool Railway Company, and the Canadian Pacific Railway Company; the Windsor, Essex and Lake Shore Rapid Railway Company against the Pere Marquette Railroad Company; Messrs. Melady & Company against the Canadian Northern Railway Company; the Board of Trade of Niagara Falls *re* interswitching at Niagara Falls, Ont.; and J. Davy against the Niagara, St. Catharines and Toronto Railway Company.

Whereas, the foregoing and many other complaints have been made to the Board against various railway companies regarding the charges made for interswitching;

Therefore, the Board, having heard the evidence adduced in support of some of the said charges—certain of the same having been allowed to stand over until the matter could be dealt with in a general manner as far as possible, with the view of establishing some fixed basis for payment for interswitching services, and having fully considered the views and submission of the various interests, and the report and recommendation of its chief traffic officer, under the authority conferred upon it by the Railway Act, doth Order, Direct and Declare as follows:—

For the interpretation, application and operation of this order, —

1. (*a*) 'Interswitching' shall not include the service incidental to the transfer and continuous carriage of through or interline traffic between points outside of and beyond the terminal limits hereinafter prescribed.

(*b*) 'Contracting Carrier' shall, where it is necessary, between the points of shipment and delivery, to use the line or lines of another carrier or other carriers than the carrier performing the interswitching service, include such other carrier or carriers.

2. It shall be lawful for the contracting carrier to absorb the toll charged for the interswitching of competitive traffic.

3. Upon traffic destined to consignees located upon, or reasonably convenient to, the tracks of the contracting carrier, or to consignees who have customarily accepted the contracting carrier's delivery, or which may be so consigned as not to indicate clearly the delivery required, and which subsequent to shipment is ordered by the shipper, the consignee, or the agent of either, for interswitch delivery involving an additional service by another carrier, and which is so interswitched, the contracting

carrier may charge and collect, in addition to its freight charges (including back charges if any), the interswitching toll of the carrier which performs such service, which toll shall not be more than twenty (20) cents per ton for any distance not exceeding four (4) miles, nor more than three dollars ($3) as the minimum and eight dollars ($8) as the maximum per carload.

4. Upon traffic destined to consignees located upon or reasonably convenient to tracks other than those of the contracting carrier, or to consignees who have customarily required such other carrier's delivery, the contracting carrier may for the interswitching service rendered necessary for such delivery charge and collect an additional toll of not more than ten (10) cents per ton for any distance not exceeding four (4) miles, nor more than one dollar and a half ($1.50) as the minimum, and four dollars ($4) as the maximum, per carload; and the interswitching toll of the carrier which performs such service shall not be more than twenty (20) cents per ton, nor more than three dollars ($3) as the minimum, and eight dollars ($8) as the maximum, per carload—provided that the contracting carrier shall not thereby be required to reduce its revenue below eight dollars ($8) per carload.

5. Distance shall be computed to or from the nearest point of interchange.

6. The foregoing tolls shall include the empty movement of the car to or from the point at which it was received by the interswitching carrier.

7. Traffic consigned 'to order' shall be subject to the provisions of paragraph three (3) and four (4) of this order as the same may apply.

8. Traffic interswitched at the point of shipment shall be subject to clause four (4) of this order, in so far as the same may be applicable.

9. The class and commodity tariffs of all railway companies subject to the provisions of the Railway Act, shall show clearly and explicitly at what points and under what circumstances interswitching services will be performed, and at whose expense.

10. The tolls herein provided for interswitching service shall not interfere with or supersede any lawfully published freight rates for ordinary freight service from station to station.

11. All and every arrangement or device, such as free or assisted cartage, cartage allowances, or the like, intended to equalize the facilities of competing companies at common points, except such as are lawfully published in the freight tariffs of the companies, are hereby prohibited.

(Sgd.) J. P. MABEE,
Chief Commissioner,
Board of Railway Commissioners for Canada.

This order becomes effective September 1, 1908.

A. D. CARTWRIGHT,
Secretary.

WINNIPEG RATE CASE.

This case was the outgrowth of a complaint filed with the Board by Portage la Prairie Board of Trade, Manitoba, against a series of special freight tariffs of the Canadian Pacific Railway Company expressed as 'to be used on re-shipments by Winnipeg wholesale houses only to traders doing business at or tributary to stations specified herein.' A judgment was delivered in this latter complaint by the late Chief Commissioner, the Hon. A. C. Killam, in which, 'inter alia,' he stated that he thought it advisable that the Board should not in that instance determine the rates to be substituted, as much delay would be involved in making the necessary inquiries but that it would be sufficient to disallow the tariffs referred to, allowing the company to substitute new ones which may be made the subject of complaint if found to be unjust

to any interests. Subsequently, the Canadian Pacific Railway Company substituted new tariffs and the Winnipeg Board of Trade and the Winnipeg Jobbers and Shippers' Association and the Deloraine Board of Trade applied to the Board for an order disallowing the tariffs of freight rates issued by the Canadian Pacific Railway Company and the Canadian Northern Railway Company in substitution for the traders' tariffs, so-called, declared illegal by the Board as preferential in favour of Winnipeg. This application was heard at Winnipeg on September 16, 17 and 18, 1908, before the Chief Commissioner and Commissioner Mills, and at the conclusion of the hearing the Chief Commissioner delivered judgment of the Board (for full text, see Appendix 'D') dismissing the application. The following was the order issued by the Board in the matter.

Order No. 5453.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Meeting at Winnipeg, Wednesday, Thursday and Friday, the sixteenth, seventeenth and eighteenth days of September, A.D. 1908.

PRESENT:

Hon. J. P. MABEE, *Chief Commissioner.*
JAMES MILLS, *Commissioner.*

In the matter of the application of the Winnipeg Board of Trade, the Winnipeg Jobbers' and Shippers, Association, and the Deloraine Board of Trade, hereinafter called the 'Applicants,' under section 323 of the Railway Act, for an order disallowing the tariffs of freight rates issued by the Canadian Pacific and the Canadian Northern Railway Companies, hereinafter called the 'Railway Companies,' in substitution for the 'Traders' tariffs, so-called, declared illegal by the board as preferential and discriminatory in favour of Winnipeg.

Upon the hearing of counsel for the Applicants and the railway companies, the evidence adduced, and what was alleged, the cities of Regina and Portage la Prairie being represented at the hearing:—

It is ordered that the said application be, and it is hereby, dismissed.

And it is further ordered, that the question of special commodity rates from Winnipeg, also the adoption of a modification of the Ontario 'town' tariffs, prescribed in the order of the Board No. 3258, dated the 6th July, 1907 (Schedule A), as a basis for special 'town' tariffs applicable to the western provinces, as suggested at the hearing, be reserved for future consideration.

(Sgd.) J. B. MABEE,
Chief Commissioner,
Board of Railway Commissioners for Canada.

BRAMPTON COMMUTATION TICKET CASE.

This was an application made by F. W. Wegenast, of the town of Brampton, Ont., under section 315 of the Railway Act, for an order directing the Grand Trunk Railway Company of Canada to issue to him the fifty-five trip ticket for use between Brampton and Toronto, similar to those in use between Oakville and Toronto, and at the same rate at which those between Oakville and Toronto are sold. The application was heard in Toronto at the sittings of the Board held in Toronto on the 18th November, 1908, before the Chief Commissioner and Commissioners Mills and

McLean, counsel appearing for the town of Brampton, the Brampton Board of Trade, the city of Toronto, the town of Oakville and the Grand Trunk Railway Company of Canada, and the applicant appearing in person. The judgment of the Board (Commissioner Mills dissenting) was delivered by the Chief Commissioner under date of the 23rd November, 1908, refusing the application for the reasons therein stated (for the full text of the judgment and of the dissenting judgment of Commissioner Mills see Appendix 'D'). Subsequently the applicant applied for a rehearing, but the Board refused to entertain the application on the ground of no new evidence sufficient to warrant a rehearing having been adduced.

PROPOSED UNIFORM CODE FOR CANADIAN RAILWAYS TRAIN RULES—PETITION OF TRAINMEN OF ONTARIO.

A special sitting was held in Ottawa on the 24th April, 1908, for the further consideration of the proposed uniform code of train rules for Canadian railways, and at the same sittings and in conjunction therewith the following matters submitted by the joint committee of the Legislative Board of the Brotherhood of Railroad Trainmen, were considered:—

1. That co-employees be allowed to attend investigations held by the Board's Inspector of Accidents, on request of witness.
2. That witness fees to be paid at such investigations be increased.
3. That the Board order an increase in the number of men on trains for flagging purposes.
4. That telegraph operators be not employed under the age of twenty-one and evidence be furnished of their having one year's experience in railroad work.
5. That the Board's inspectors be required to ride on and inspect the condition of locomotives.
6. That all engines be equipped with dump ash pans, such as will avoid the necessity of a man going under the engine to clean the same.

The Board also considered at the said sittings, in conjunction therewith, the following matters presented to it by memorial through the Ontario Brotherhood of Railroad Trainmen:—

1. That all brakes, dogs and ratchets be placed on the top of the car instead of on the step at the end of the car.
2. That all cars used as caboose be equipped with air brakes, gauge, conductor's valve, platform, steps and cupola.
3. That operating levers be placed on both sides of the draw-bar along the end of the car.
4. That no obstructions be piled on the tops of any box cars while being hauled by the train crew.
5. That any order requiring men to ride on the top of trains be abolished.
6. That safety handholds and steps be placed on engines.
7. That obstructions and structures be placed not less than six feet clear of rail.
8. That not less than five men be placed on any train and not less than three men on light engines.
9. That there be a car limit as to number.
10. That passenger brakemen have one year's experience in yard or freight service.
11. That steps be taken to prevent the handling of crippled cars on trains, except on wreck trains.

At this meeting there were present Mr. Harvey Hall, legislative representative of the different labour organizations; Mr. David Campbell, representing the Order of Railroad Telegraphers; Mr. Geo. A. Wark, representing the Locomotive Firemen; Mr. Lawrence, representing the Brotherhood of Locomotive Engineers; Mr. Courte-

nay, representing the Trainmen; and the following representatives of the different railways:—

M. K. Cowan, K.C., assistant solicitor, and W. G. Brownlee, general superintendent, representing the Grand Trunk Railway Company.

F. H. Chrysler, representing the Dominion Atlantic Railway.

E. W. Beatty, assistant solicitor; J. W. Leonard, assistant general manager, and H. H. Vaughan, assistant to vice-president, representing the Canadian Pacific Railway Company.

W. P. Torrance and R. H. L'Hommedieu, general manager, representing the Michigan Central Railway Company.

Andrew Haydon, representing the Great Northern Railway, operating lines in Canada.

C. H. Hibbard, representing the Q., M. and S. Railway.

T. J. Kennedy, general manager, representing the Manitoulin and North Shore Railway.

H. W. Gays, general manager, representing the Ottawa and New York Railway.

Geo. Collins, general manager, representing the Central Ontario Railway.

J. H. Black, general superintendent T. and N. O. Railway, representing the Temiskaming and Northern Ontario Railway.

Mr. Little, representing the Orford Mountain Railway.

F. M. Spaidal, general superintendent, representing the Canadian Northern Railway Company.

J. S. Pyatt and Mr. Trump, general superintendent, representing the Père Marquette and the London and Port Stanley Railway.

J. E. Duval, representing the Canadian Car Service Bureau.

F. C. Cleaver, representing the Rutland Railway.

Dealing with the question of the proposed uniform code of train rules for Canadian railways, it was agreed that the committee of Trainmen should file with the Board, as a confidential document, their criticism of the final revision of the rules submitted by the select committee of five representing the railway companies operating in Canada, and that upon such criticism being filed, the Board would then again take the matter up and for that purpose the further consideration of the uniform code of train rules stood adjourned. Subsequently a special committee of five to consider the objections raised by the trainmen was named by the board. This committee was composed of two officers of the Board, two representatives of the railway companies, and one representative of the men.

In connection with the memorial of the Trainmen's Association of Canada, for the adoption of certain regulations by the Board as heretofore mentioned the Board issued the following order:—

Order No. 5888.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Meeting at Ottawa, Wednesday, the sixteenth day of December, A.D. 1908.

PRESENT:

Hon. J. P. MABEE, *Chief Commissioner.*
Hon. M. E. BERNIER, *Deputy Chief Commissioner.*
JAMES MILLS, *Commissioner.*

In the matter of the memorial of the Trainmen's Association of Canada, for the adoption of certain regulations by the Board, having in view the protection of employees of the railway companies, subject to the jurisdiction of the Board:—

Upon the report of the operating officials of the Board; and upon hearing the representatives of the railway companies and of the employees; and in pursuance of

the powers conferred upon it by sections 30 and 269 of the Railway Act, and of all other powers possessed by the Board in that behalf,—

It is ordered that,

1. No freight train, except work or construction trains of fifteen cars or less, now in service, shall be made up or allowed to proceed upon its journey unless at least three-quarters of the cars composing such train have air brakes in good working order.

2. The number of cars that may be drawn in freight trains shall be left entirely to the judgment of the operating officials of such railway companies; in all cases, however, in which it may be found necessary to double-head, the leading engine shall control the train.

3. Every road locomotive engine shall be equipped with a step or steps and hand-holds on both sides of and at or near the rear ends of tenders; foot-rests shall be provided on the pilots of every such engine, sufficiently wide for a man to stand on; every switching or yard engine shall be equipped with foot-boards and headlights on the front and rear ends of the engine and tender. such foot-boards to be not less than ten inches wide; the back of such foot-boards shall be protected by a board not less than four inches high, and if cut in the centre, the inner ends shall be protected in like manner; and foot-boards and headlights shall be placed on the rear end of the tender of every road locomotive used for switching service, except in case of emergency; in no case, however, shall any engine be continuously used for switching purposes for more than twenty-four hours without such equipment.

4. The number that shall comprise the switching engine crews shall be left entirely to the judgment of the operating officials; on main lines light engines shall not be run at a distance greater than twenty-five miles in any one direction without a conductor, in addition to the engineer and the fireman; and on branch lines, the operating officials shall determine the necessity of requiring conductors on light engines.

5. Every locomotive engineer of such companies must have at least one year's continuous experience as a fireman, pass a satisfactory examination in regard to the proper care of locomotive engines, the handling of air brakes, and train rules and regulations, be at least twenty-one years of age, and undergo an eye and ear test by a competent examiner before being eligible for appointment as such engineer. Except in cases of emergency, every conductor of such companies must have at least one year's experience as a brakeman or conductor and be at least twenty-one years of age before being eligible for appointment as such.

6. The telegraph operators of such companies required to handle train orders shall be at least eighteen years of age, able to write a legible hand, to send and receive messages at the rate of not less than twenty words a minute, and be thoroughly familiar with and required to pass an examination upon train rules before a competent examiner.

7. Every employee of such railway companies engaged in operating trains shall, before undertaking such duties, be required to undergo a colour test by a competent examiner.

8. All railway companies shall strictly conform to the rules and regulations, from time to time approved by the Master Car Builders' Association, governing the loading of lumber, logs and stone on open cars, and the loading and carrying of structural material, plates, rails and girders. No material of any kind shall be carried upon the roofs of cars.

9. All open drains crossing tracks in the yards of such companies shall be covered for five feet on each side of the rails, except in times of flood, when temporary open drains may be provided; semaphore and signal wires, when they cross under tracks, shall be carried in pipes or boxes; new buildings and semaphores and poles erected shall be placed not less than six feet from the rail of the main track; water stand

supply pipes shall be fastened parallel with the main line; and engine-men shall be required to see that this is done after using such pipes.

10. Every person or company offending against any of the foregoing provisions shall forfeit and pay the sum of $50 for every such offence.

(Sgd.) J. P. MABEE,
Chief Commissioner,
Board of Railway Commissioners for Canada.

CARTIER AND SARNIA TUNNEL—STOP-OVERS ON WESTERN GRAIN.

This matter came before the Board for consideration in connection with a complaint filed by the Montreal Board of Trade, Transportation Bureau. The complaint was heard and evidence taken at the sittings of the Board held in the city of Montreal on the 22nd of December, 1908, before the Chief Commissioner, the Assistant Chief Commissioner and the Deputy Chief Commissioner. Mr. W. S. Tilston represented the Montreal Board of Trade; Mr. C. B. Watts the Dominion Millers' Association; Mr. J. E. Walsh the Canadian Manufacturers' Association; Mr. E. W. Beatty the Canadian Pacific Railway Company; and Mr. M. K. Cowan, K.C., the Grand Trunk Railway Company.

The judgment of the majority of the Board (the Assistant Chief Commissioner dissenting) was delivered on the 28th of December, 1908. (For the full text of judgment and dissenting judgment, see Appendix 'D.')

The following was the order of the Board issued in pursuance of the said judgment.

Order No. 6147.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Meeting at Montreal, Thursday, the twenty-first day of January, A.D. 1909.

PRESENT:

Hon. J. P. MABEE, *Chief Commissioner.*
D'ARCY SCOTT, *Assistant Chief Commissioner.*
Hon. M. E. BERNIER, *Deputy Chief Commissioner.*

In the matter of the complaint of the Transportation Bureau of the Montreal Board of Trade against an additional charge of one cent per 100 pounds imposed by the Canadian Pacific Railway Company at Cartier, Ontario, on western grain and grain products, in carloads, consigned to Cartier, 'for orders,' under Supplement No. 13, effective September 1, 1908, to the company's tariff, C.R.C., No. E 678, and still in force by Supplement No. 15 to the same tariff.

Upon the hearing of counsel for the Transportation Bureau of the Montreal Board of Trade, the Canadian Pacific Railway Company, the Dominion Millers' Association and the Canadian Manufacturers' Association, the evidence adduced and what was alleged,—

It is ordered that the said charge of one cent per 100 pounds imposed by the Canadian Pacific Railway Company at Cartier, Ontario, on western grain and grain products in carloads, consigned to Cartier 'for orders,' under Supplement No. 13, effective September 1, 1908, to the company's tariff, C.R.C., No. E 678, and still in force by Supplement No. 15 to the same tariff; and by the Grand Trunk Railway Company at Sarnia tunnel, on grain and grain products, in carloads, originating in western Canada, destined to points in eastern Canada, and routed via Chicago, Chicago

Junctions, or Milwaukee to Sarnia tunnel, Ontario, 'for orders,' under Supplement No. 3 to the company's tariff, C.R.C., No. E 1101,—be and the same is hereby disallowed, and a 'stop-over' charge of twenty-five (25) cents per car a day for the first forty-eight hours, and the car service toll thereafter, substituted therefor.

And it is further ordered, that this order become effective not later than the 15th day of February, 1909.

D'ARCY SCOTT,
Assistant Chief Commissioner,
Board of Railway Commissioners for Canada.

CAR SHORTAGE.

As stated in previous report, the equipment question would appear to have worked out its own solution. That is to say, that there is still a considerable excess of idle cars both in Canada and the United States, over and above the requirements for traffic purposes.

During the past year the number of complaints made to the Board in regard to car shortage has greatly decreased, and as will appear from statement of uniform complaints in Appendix 'E,' filed with the Board, there were less than a dozen complaints made to the Board during the year, and these were of local or minor importance.

No further action, therefore, has been taken by the Board in regard to the equipment question, other than to deal with the special complaints made.

FORM OF RELEASE FOR FREIGHT SHIPPED TO FLAG STATIONS.

The matter of a form of release of responsibility for freight shipped to flag stations upon the lines of all railways in Canada subject to the jurisdiction of the Board having been brought before the Board in connection with the complaint of the Winnipeg Board of Trade respecting alleged demand of the Canadian Pacific Railway Company that shippers in Winnipeg sign a release form for freight shipped to regular or flag stations, the Board having considered the matter at its meeting held in Winnipeg on February 8, 1909, issued an order providing as follows:—

1. That hereafter the form of release of responsibility for freight shipped to flag stations, upon the lines of all railways in Canada, subject to the jurisdiction of the Parliament of Canada, be in the following form:—

> 'In consideration of the.....Railway Company having received the above described property for transportation from..... Station to.....Station.....do hereby release said company from all loss or damage that may occur to any of the above mentioned property after it has been unloaded from the cars at.....Station, the said station being a flag station without agent.'

2. That no other form of release shall be required to be signed by any shipper of any property to any flag station upon any line of railway in Canada until further order (if any) regarding facilities and conveniences to be established by railway companies at flag stations.

INVESTIGATION OF EXPRESS COMPANIES.

As stated in previous report, owing to the illness and death of the then Chief Commissioner of the Board, Hon. A. C. Killam, further sittings in connection with the above investigation had to be postponed and, as a consequence, further enlarge-

ments were granted by the Board, extending the time advised by Section 27 of the Act 6 Edward VII, Cap. 37, until the first of June, 1909, within which the express companies were required to file their tariff of tolls. After the Chief Commissioner, Hon. J. P. Mabee, had an opportunity to read the large amount of evidence taken and familiarize himself with the question arising therefrom, sittings of the Board were held in Toronto on.....day of December, 1908, and adjourned sittings in Montreal commencing January 5, 1909. Previous, however, to these sittings the Board made an order under date of October 22, 1908, order No. 5493, temporarily approving the express classification for Canada, C.R.C. No. 1, Table of Graduation Charges, C.R.C. No. 2, and Monthly Classification C.R.C. No. 3, filed with the Board on July 2, 1908. At a subsequent meeting held in the city of Ottawa on January 11, 1909, the Board made an order, No. 6020, rescinding the said order of October 22, 1908, and directing all express companies to at once notify their agents to apply the tariff and rules in instances prior to January 1, 1909; and in all respects to carry on their business in compliance with the rates and rules prior to that date, until further order of the Board; and further providing that the cancelling of the said section and tariff filed, should not necessarily give rise to claims for reparation as to any shipments occurring within ten days from January 12, 1909, but, that such claims if made should be dealt with, regard being had to the steps taken by the companies to inform their agents as required by the order of the Board.

JUDGMENT OF THE BOARD—NEW CLASSIFICATION DISALLOWED.

The Chief Commissioner.—It is not denied that this classification, which came into force on January 1, 1909, will materially increase the receipts of the express companies. It is not an inconsiderable volume of traffic that the rates have been increased through the charges on returned empties, and the adoption of the weight and measurement rule. It has been shown that the movement under these heads is large and considerable. The increase, it is said, will run up to nearly 100 per cent. When this inquiry began, before I became a member of the Board, an undertaking was given on behalf of the express companies that, pending the inquiry, no increase of tolls should be made by them. I think it is the duty of the Board to require that this undertaking be carried out. When this classification was approved I understood that such changes as were made were small, and that, upon the whole, there was a reduction and not an increase. There was, therefore, some surprise when it was found that these general increases had been attempted.

There was no notification of any kind given to the public of these changes, and no opportunity to shippers to adapt their business to such changes as might be reasonable. I can only repeat I would not have signed the order approving of this classification upon any ex parte application of the express companies had I been in possession of the facts now before us, but would have required public notice to be given in order that those who have to pay these tolls should have an opportunity to present their views. Many and important rules have been changed; those that I have carefully considered are mostly changes in favour of the companies. These have not yet had sufficient investigation, nor is the full purport of them yet understood by either the public or the Board.

I am free to confess that this matter was not given the consideration it was entitled to when the order of October was made, my understanding being that it was for the convenience and not for the profit of the express companies, and that tolls were not, upon the whole, being increased.

It is said the disallowance now of this new tariff and classification will be a hardship upon the express companies, requiring reprinting the old classification, and its distribution. I regret that this is so, but the present confusion is brought about

by reason of the companies' action in filing and asking approval of a classification that materially increases the tolls, when it was understood this should not be done, and if an order has inadvertently issued, that should not have been made, it is the plain duty of the Board to recall it, and its so doing in this case only reinstates the conditions that shippers are perfectly familiar with and upon which they have been doing business for many years.

Complaint is made that this course casts an imputation of bad faith upon the companies. I do not say, and have not said, that there was any bad faith, or deliberate intention to deceive or mislead the Board. The traffic officers of the companies discussed matters very fully with the chief traffic officer of the Board, who was of opinion that, upon the whole, the proposed changes would reduce instead of raise the receipts of the companies, but so far as the evidence given before us goes, the contrary is the case. It is, I think, unfortunate that this proposed change in the classification and rules had not been brought to the attention of counsel for the government, who have had charge of this whole inquiry from its inception. Had this course been taken, it is fair to assume that after inquiry as to the effect of the proposed changes, approval would have been for present withheld. This omission I regard as an oversight, and not by design.

It was represented to me that some shippers were defrauding the express companies by shipping full packages by freight, and returning the empties by express, taking advantage of the rule allowing empties to return free. To stop this, they proposed to charge 50 per cent of the merchandise rate, and in some instances specific charges on the returned empties. The facts now show that the effect of this upon the business of only some 18 or 20 shippers would be to cause an increase of $25,000 and $30,000 in express tolls upon their volume of business in 1908. I do not undertand, when approving this change, that the companies were protecting themselves in this way.

Many cases in the United States and England, and followed here, hold that a long-established rate is regarded as reasonable unless shown to be too low, it would not be proper to permit a general increase in rates through the medium of imposing a toll upon returned empties without requiring the companies to show affirmatively that the outward rate was not sufficient to cover the transport of the returned empty free of charge. Of course, we do not at this time deal with the suggestion that the practice involves discrimination.

The weight and measurement rule is creating a disturbance that could have all been avoided if public notice had been given so shippers could have adjusted themselves to it, if it were thought a proper rule to introduce, as to which we can say nothing at present.

We are of opinion that the order approving this classification, of January 1, 1909, must be rescinded, and this classification and variation of the old rules disallowed. Of course, this is not to be regarded as a final disposition of the matter, but merely leaves everything connected with the express business as it stood prior to January 1, and all evidence applicable to the subject given upon the inquiry will be treated as being given for the purpose of obtaining allowance of this classification and amended rules, some of which at present appear not to be unreasonable.

The companies must at once notify all their agencies to apply the tariff and rules in existence prior to January 1, and in all respects carry on their business in compliance with the rates and rules in force at and prior to that date until further disposition of this hearing.

Cancellation of the tariff filed and above referred to shall not necessarily give rise to claims for reparation as to any shipments occurring within the next ten days, but such claim, if made, shall be dealt with individually, regard being had to the steps taken by the companies to inform agents of the above cancellation.

Further hearing of the express investigation was continued before the Chief Commissioner to the Board at St. John, N.B., on the 18th of January, 1909; and by

the Chief Commissioner and Commissioner McLean, at Winnipeg, on the 1st of February, 1909; Regina, the 11th of February; Medicine Hat, the 15th of February; Calgary, the 17th of February; Edmonton, the 19th of February; Vancouver, the 23rd of February; Victoria, the 27th of February; Nelson, the 5th day of March; Lethbridge, the 8th day of March, and Winnipeg, the 10th of March.

Prior to the above sittings of the Board, on the dates stated forthwith, the following notice was sent under instructions of the Board, to the secretaries of the various boards of trade in the provinces of Manitoba, Saskatchewan, Alberta and British Columbia, and the express companies and others directly interested, notifying them of the sittings as follows:—

January 18, 1909.

Re Complaint against Express Companies originating in the Provinces west of the Province of Ontario.

DEAR SIR,—I am directed to inform you that the Board of Railway Commissioners for Canada will hold a sittings in the following cities and towns commencing on the dates named, viz.:—

Winnipeg, February 1, 1909.
Regina, February 11, 1909.
Medicine Hat, February 15, 1909.
Calgary, February 17, 1909.
Edmonton, February 19, 1909.
Vancouver, February 23, 1909.
Victoria, February 27, 1909.

During its western sittings, the Board heard numerous complaints, almost all given, such sittings to be held in the court house, and the Board will be prepared, on the dates specified and at the places named, to hear complaints against express companies doing business in the western provinces.

If your board of trade have any complaints to lay before the Board, you are requested to notify the Secretary of the Board to that effect as soon as possible after the receipt of this notice.

Yours truly,
(Sgd.) A. D. CARTWRIGHT,
Secretary, Board of Railway Commissioners.

The Secretary, Board of Trade.

During its western sittings, the Board heard numerous complaints, almost all of which have been held over to be dealt with when the general question of express rates has been disposed of, and since the return of the Chief Commissioner and Commissioner McLean from the western sittings, arrangements have been made to continue the investigation the later part of April or early in May in Toronto, the delay being caused by counsel for the various interests not being able to arrange for an earlier continuation.

TORONTO UNION STATION AND PROPOSED VIADUCT.

A special sittings of the Board was held in Toronto on the 20th May, 1908, and the two following days, in connection with the settling of the plans of the Union Station in Toronto, and matters connected therewith, and also in settling the question whether the railway tracks in Toronto should be raised or depressed in different parts of the city, and whether any or what further bridges should be built for carry-

ing streets over railways along the water front. Counsel appeared at the said sittings for the corporation of the city of Toronto, for the Toronto Board of Trade, the Grand Trunk Railway Company of Canada, the Canadian Pacific Railway Company, and for certain property owners affected by the proposed viaduct. After hearing counsel, the application was adjourned until the 4th June, the Board directing that in the interim the corporation of the city of Toronto should file and serve a formal application on the parties interested, setting forth the character of the works required.

At the hearing on the 4th June, objection was taken to the jurisdiction of the Board to order the elevation of the railway companies' tracks along the Toronto water front, and the judgment of the Chief Commissioner, concurred in by Commissioner Mills, was delivered on the 8th June, 1908. (For full text of the judgment, see Appendix 'D.')

The Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company made application to a judge of the Supreme Court on the 24th June, 1908, for leave to appeal to the Supreme Court on the question of the jurisdiction of the Board to entertain the application of the municipality. Mr. Justice Duff, who heard the application, reserved judgment, and having expressed the opinion upon the argument that there might be questions of law raised other than that of jurisdiction, and stating that as to these application would have to be made to the Board for leave to appeal, the railway companies thereupon made an application to the Board on the 14th July, 1908, for leave to appeal and for an opportunity to the parties to give any further evidence upon the questions involved in such appeal. Upon this last application, the Chief Commissioner, expressing the views of the Board, stated that the Board was of opinion that the next appointment it gave should be one to take all the evidence that any person might offer regarding the question as to whether an order for a viaduct or a grade crossing should be made, and that the case should not be split up any more than it had been.

Subsequently the city applied for an appointment to proceed with taking the evidence at an early date, which the Board granted, and the matter was taken up at a sittings of the Board held in Toronto on the 8th December, 1908, before the Chief Commissioner, the Assistant Chief Commissioner and Commissioner Mills. The judgment of the majority of the Board was delivered by the Assistant Chief Commissioner, under date of the 29th December, 1908. (For the full text of the judgment, see Appendix 'D.')

The Chief Commissioner wrote a separate judgment under date of the 30th December, 1908, in which he differed from his colleagues on certain points. (For the full text of his judgment, see Appendix 'D.')

A further hearing for the purpose of settling the terms of the order to be issued pursuant to the judgment of the Board was had on the 12th of January, 1909, in Ottawa; and upon the undertaking of counsel for the railway companies given to counsel for the city of Toronto, to file complete and working plans within three months from that date, and to furnish copies thereof to the city, it was arranged that final settlement of the order should stand adjourned for three months.

The matter of the appeal of the railway companies to the Supreme Court of Canada from the judgment of the Board is still pending.

Re TELEPHONE RATES.

As stated in the previous report, a large amount of evidence had been taken in this connection and the late Chief Commissioner, the Hon. A. C. Killam, K.C., was engaged in preparing a judgment at the time of his death. Since then no further evidence has been taken, save dealing with the matter of the Bell Telephone Company and the Windsor Hotel Company, in which the following order was made :—

Upon the hearing of counsel for the applicant company and the Windsor Hotel Company, the evidence adduced, and what was alleged:—

It is ordered, that the said contract be, and it is hereby approved, subject to the following conditions, namely:—

1. That the charge of ten cents for each connection had over any telephone thereby leased with the Montreal Exchange subscribers of the applicant company be subject to alteration at any time by the board.

2. That any extension of the term of the agreement after the expiration of ten years, be subject to the approval of the Board.

The reasons for this order appear in Appendix 'D.'

(Sgd.) J. P. MABEE,
Chief Commissioner,
Board of Railway Commissioners for Canada.

Re RAILWAY FENCING AND CATTLE GUARDS.

The Board has been in receipt, during the past year, of a number of complaints from farmers and settlers in the northwestern provinces, complaining of neglect or failure on the part of the railway companies to properly fence their right of way. Also numerous complaints in respect to cattle killed on railway tracks.

In view of these complaints, after the return of the Chief Commissioner and Commissioner McLean from the western sittings, held by the Board during the months of February and March, the following circular, together with memorandum prepared by the Chief Commissioner and a draft order in connection therewith, was mailed to all railway companies subject to the jurisdiction of the Board, and to all secretaries of boards of trade of the principal towns of the provinces of Manitoba, Saskatchewan, Alberta and British Columbia. The Board will, at its sittings to be held the first Tuesday in May, hear the interested parties as intimated in the circular.

The Board feels that the subject is one which calls for its immediate attention, and hopes by the proposed action to get rid of the cause of these complaints, or at least greatly ameliorate the condition of affairs in this respect now existing.

The following are the documents referred to.

March 25, 1909.

Circular No. 34.

Cattle Guards, Highway Crossings and Fencing of Rights of Way.

DEAR SIR,—I am directed by the Board to inclose you a memo. and draft order prepared by the Chief Commissioner upon the question of fencing the rights of way of railway companies, cattle guards and highway crossings. The final settlement of the terms of this order will be spoken to at a meeting of the Board to be held in Ottawa on May 4 next. Any suggestions you may see fit to make either by letter or in person at this meeting, will receive consideration.

Yours truly,
(Sgd.) A. D. CARTWRIGHT,
Secretary, Board of Railway Commissioners.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

PRESENT:

Hon. J. P. MABEE, *Chief Commissioner.*
S. J. MCLEAN, *Commissioner.*

In the matter of complaints against railway companies for non-compliance with the provisions of the statute regarding fences and cattle guards and public highway crossings.

Upon hearing complaints from many individuals, public bodies and municipalities that railway companies are not complying with the provisions of section 254 of the Railway Act, and that much hardship is caused by the exemption provided for in subsection 4 of the said section, and upon request being made that the Board intervene, as provided for by said subsection, and upon hearing what was said upon behalf of the railway companies,—

It is ordered, that all railway companies subject to the jurisdiction of this Board shall, as to all railway lines completed, owned or operated by them, whether or not the lands on either side of the railway are inclosed, settled or improved—

1. Within one year from this date erect and maintain, on each side of the right of way (1) fences of a minimum height of 4 feet 6 inches, with swing gates, 18 feet in width, at farm crossings, with minimum height aforesaid, with proper hinges or fastenings; (2) cattle guards on each side of the highway at every highway crossing at rail level. Provided that siding or hurdle gates, constructed before the 1st day of February, 1904, and farm gates of a minimum width of 16 feet, constructed before the 1st day of April, 1909, may be maintained.

2. The railway fences at every highway crossing shall be turned into the respective cattle guards on each side of the highway.

3. All fences, gates and cattle guards shall be suitable and sufficient to prevent cattle and other animals from getting on the railway.

4. As to lines not yet completed or opened for traffic, or in course of construction, all such companies shall—

(1) Erect fences, gates and cattle guards as aforesaid as the line of railway is graded.

(2) If not yet opened for traffic, then such fences, gates and cattle guards as aforesaid shall be erected and maintained before such railway shall be opened for traffic.

(3) Where the railway is being constructed through inclosed lands, it shall be the duty of the railway company to at once construct such fences so that cattle and other animals cannot escape, or injury be caused by them to crops.

5. Where in mountainous or other sections of the country, it shall be made to appear to the Board that no necessity exists for the fencing or other works hereinbefore directed, the company or companies may apply to the Board for exemption from fencing and other works, and such exemptions may be made as the Board deems proper.

6. All railways now in operation shall, within one year, construct and maintain suitable and proper highway crossings at all such as may be opened for travel, and additional ones at once upon such highways being from time to time open for travel.

7. All railways not yet opened for traffic, or hereafter constructed shall, before the same are opened for traffic, construct and maintain suitable and proper highway crossings at all such as may be opened for travel, and additional ones at once upon such highways, being from time to time opened for travel.

8. All such crossings shall comply with the standard conditions of the Board, which are as follows:—

(1) That, unless otherwise ordered by the Board, the width of approaches to rural railway crossings over highways be 20 feet road surface on concessions and main roads, and 16 feet on side and bush roads.

(2) That a strong, substantial fence or railing, 4 feet 6 inches high, with a good post-cap (4 inches by 4 inches), a middle piece of timber (1½ inches by 6 inches), and a 10-inch board, firmly nailed to the bottom of the posts to prevent snow from blowing off the elevated roadway, be constructed on each side of every approach to a rural railway crossing, where the height is 6 feet or more above the level of the adjacent ground, leaving always a clear road surface of 20 feet wide.

(3) That the width of approaches to rural railway crossings made in cuttings be not less than 20 feet clear from bank to bank.

(4) That, unless otherwise ordered by the Board, the planking or paving blocks or broken stone, topped with crushed rock screenings, on rural railway crossings over highways (between the rails and for a width of at least 8 inches on the outer sides thereof) be 20 feet long on concession and main roads, and 16 feet on side and bush roads.

Re RAILWAY FENCING AND CATTLE GUARDS.

The CHIEF COMMISSIONER.—At every sitting of the Board, from Winnipeg to Victoria, complaints were made against the railway companies in connection with the fencing, or rather the defective and non-fencing of their rights of way, and that the law regarding cattle guards was not complied with. Claims innumerable for stock killed, and refusal to make compensation were disclosed. Many cases appeared where stock had been killed upon the track, and farmers were afraid to ask for compensation for fear of being involved in endless litigation.

It would seem, perhaps, that upon the whole the absence of fences along the right of way is a more fruitful source of loss to the rancher and farmer than defective cattle guards or of their absence.

Cases were given where those in charge of the construction of railways entered upon improved and inclosed land, threw down the fences, made no attempt to inclose the right of way, allowing stock to get out upon the highways, thus injuring crops and in some instances these cattle were killed upon distant railway tracks. Whether these wrong-doers were independent contractors or servants or officers of the railways under construction, did not appear, but so far as this Board has power, it is determined that such high-handed and unreasonable conduct shall cease.

The Railway Act is clear upon the questions of fencing and cattle guards, and the time has arrived when something must be done to compel the observance of its provisions.

Section 254 provides as follows:—

'1. The company shall erect and maintain upon the railway—

(*a*) Fences of a minimum height of 4 feet 6 inches on each side of the railway;

(*b*) Swing gates in such fences at farm crossings of the minimum height aforesaid, with proper hinges and fastenings, provided that sliding or hurdle gates constructed before February 1, 1904, may be maintained; and

(*c*) Cattle guards on each side of the highway at every highway crossing at rail level with the highway.

'2. The railway fences at every such highway crossing shall be turned into the respective cattle guards on each side of the highway.

'3. Such fences, gates and cattle guards shall be suitable and sufficient to prevent cattle and other animals from getting on the railway.

'4. Wherever the railway passes through any locality in which the lands on either side of the railway are not inclosed and either settled or improved, the company shall not be required to erect and maintain such fences, gates and cattle guards, unless the Board otherwise orders or directs.'

There has been no order of the Board respecting fencing through uninclosed or unimproved lands, and the practice of the companies, so far as I can learn, has been to leave their rights of way entirely unfenced, until the adjacent owner or owners had erected side fences, when such owner or owners would be expected to call upon the company to erect its fences. Cases, however, were presented where the side fences had been long since erected, but yet the railway fences had not been erected.

We have been furnished with no information by the railway companies of the amounts paid by them for cattle killed upon their lines, or of the number of claims they have disputed, but from the large number of cases that were brought to the attention of the Board where compensation has not been made, the better opinion perhaps is that the disputed claims vastly exceed those in which settlements have been made, if not, the companies have been paying out very large sums that would have been much better spent in protecting their rights of way.

Now, the statute defines clearly the kind of fence and cattle guard that must be provided; the fence must be at least 4 feet 6 inches high, and it and the cattle guards must be 'suitable and sufficient to prevent the cattle and other animals from getting on the railway.

It is just as incumbent upon the companies to fence against hogs as it is against horses, yet it is not pretended that any attempt has been made to do so, and instances were given where farmers had so many hogs killed that they were compelled to abandon any attempt to raise them.

It seems to be the practice in Manitoba, Saskatchewan, some parts of Alberta and British Columbia to remove the cattle guards entirely in the winter time. This is done, it was said, to facilitate the operation of the snow ploughs. It is not shown by any railway expert that this practice is necessary, but it was shown by many Saskatchewan farmers that it was more important to them to have the cattle-guards in place during winter than any other season, as during the other seasons their cattle were mostly pasturing in the hills in charge of herders. At any rate, these cattle guards have been removed during the winter months without authority, and unless a great deal more can be shown than has yet appeared, the practice must cease. Furthermore, the railway companies must establish and maintain cattle-guards that will prevent cattle and other animals from getting upon the railways. This is the requirement of the law, and I know of no reason why it should not be complied with.

The provisions of clause 4 have been abused, and this statutory exemption from fencing has been used by the companies to free themselves from making compensation in innumerable cases of meritorious claims. This condition of affairs cannot be permitted to continue; it works great hardship upon the public, and is of little or no benefit to the railway companies. The conditions in the west have greatly changed since this exemption was granted to the companies, and as they are compelled at some stage of the undertaking to erect fences, I am clearly of the opinion that no hardship will be imposed if that stage is made the initial one.

I am aware that in various parts of the country no necessity now exists and possibly never will, for the erection of fences. The formal order may contain a provision that railway companies, the lines of which have already been constructed, may apply to exempt certain sections of the road from the operation of the order, when, if conditions are shown that such course will entail no hardship upon the public, the Board may so declare. The like course may be taken where railways are in course of construction, and as to such latter, when application is made to open the road for traffic, the fences, cattle-guards, highway and farm crossings and gates shall all form part of the work necessary to be complete according to the statute and the Board's regulations

before permission is given to operate the road. I am convinced that this course will, in the end, be less expensive for the railway companies, as the erection of fences, gates, &c., can all be carried on at the time of construction at less cost than later on, to say nothing of saving liability for damage claims for stock killed and law costs in defending, even if successful.

Many complaints were made that in the construction of the railway lines the highway crossings were left in an impassable state, causing endless inconvenience and trouble to the public. I confess I am at a loss to understand such disregard of the rights of others, and such selfish and inconsiderate conduct upon the part of those constructing the railways, or responsible for their construction. If these works are let out to contractors, the railway companies may as well at once understand that they must make some provision in their contracts that will compel their contractors to treat the public with ordinary decency. This Board has no control over the contractors and can only deal with the railway companies. These highway crossings can be constructed at less expense when the grading is being done than later on, after the road is completed; and with respect to roads not yet completed, they will not be opened for traffic until every highway crossing opened for travel is put into the condition called for by the Board's regulations. As to these railways now in operation, all highway crossings, opened for travel, must be put into the condition called for by the regulations within one year from this date.

A draft order embodying the foregoing may be sent to all the companies, and its settlement spoken to by them at the May meeting of the Board at Ottawa.

March 23, 1909.

ROBERTSON AND THE GRAND TRUNK RAILWAY COMPANY.

This was an application of W. N. Robertson, to the Board under Section 26 of the Railway Act, to compel the Grand Trunk Railway Company of Canada to issue third class tickets at the rate of one penny per mile for each mile travelled and to run third class passenger carriages attached to one train per day each way, throughout the length of its line. The application was heard by the Hon. A. C. Killam, late Chief Commissioner, Deputy Chief Commissioner and Commissioner Mills and pursuant to the judgment of the Chief Commissioner an order was made directing the Grand Trunk Railway Company of Canada to run every day throughout the length of its line of railway between the city of Toronto in the province of Ontario to the city of Montreal in the province of Quebec, at least one passenger train having in it third class carriages for passenger traffic; and that the fare or charge for each third class passenger by any train on the said portion of its railway do not exceed two cents for each mile travelled; and the company was ordered forthwith to file with the Board passenger tariffs for the aforesaid portion of its railway embodying the said rate of two cents per mile for third class passengers.

The Grand Trunk Railway Company were granted leave to appeal to the Supreme Court of Canada, and the order of the Board was stayed pending the appeal. The Supreme Court of Canada affirmed the order of the Board and dismissed the appeal.

Further appeal was taken to the Judicial Committee of the Privy Council in England, in which appeal the Grand Trunk Railway Company were unsuccessful. Subsequently the Grand Trunk Railway Company filed with the Board a new tariff for third class passenger traffic between the stations, Montreal and Toronto inclusive, effective on April 1, 1909, being C. R. C. No. 'E' 958; and otherwise conformed to the order of the Board.

PROTECTION OF HIGHWAY CROSSINGS BY ELECTRIC BELLS.

Orders have been issued by the Board from time to time providing for the installation and maintenance of electric bells at highway crossings where the highway is crossed by the railway and the Board having received from time to time complaints alleging that the bells were not kept in satisfactory order by the railway companies, after due consideration of the matter, and pursuant to the powers conferred upon it by sections 30 and 269 of the Railway Act, issued on the 3rd November, 1908, an order providing as follows:—

1. Every electric bell upon the line of any railway company subject to the legislative authority of the parliament of Canada, installed for the purposes of protection, shall be inspected every morning by the sectionman in whose division or section such bell is, and tested by placing a wire across the rail, upon each side of the crossing or by establishing electric connection by any other device or method which will indicate whether or not the bell is in good working order, and that if the bell fails to ring, or rings continuously, a flagman at once be placed at such crossing, whose duty it shall be properly to protect the same until such bell is repaired; and that notice of such non-repair be at once given to the station agent nearest to such bell, whose duty it shall be to report the matter at once to the department having charge of the operation and repair of such bells.

2. That failure to comply with the provisions of this order shall subject the defaulter to a fine of $50, payment of which may be ordered by the Board upon proof of the offence.

EQUIPMENT OF NON-PLATFORM CARS WITH OPERATING LEVERS.

The Board, having had under consideration the question of the equipment of non-platform cars with operating levers, and having had the matter investigated and reported upon by one of its officers, pursuant to the powers conferred upon it by sections 30 and 269 of the Railway Act, issued an order under date November 25, 1909, as follows:—

1. Every railway company subject to the legislative authority of the parliament of Canada, operating a railway by steam power, shall equip, within the time hereinafter mentioned, each of its non-platform cars, as for example, ordinary box and mail or baggage cars, with the proper operating lever for uncoupling cars, and dispense with the operating wheel where in use on the ends of such cars for that purpose.

(*a*) In cars to be constructed in the future for use in their said railways, before they are so used.

(*b*) In cars under construction or in shops undergoing repairs, within three months from the date of this order;

(*c*) In cars at present in use on their respective railways, within six months from the date of this order.

2. Every such railway company shall be liable to a penalty of a sum not exceeding fifty dollars for every failure to comply with the foregoing regulations within the time for their coming into force and thereafter.

SMOKE NUISANCE.

The Board having been in receipt of complaints from several of the principal cities in the Dominion of Canada in regard to what is termed the smoke nuisance as applied to railway locomotives, and having at several sittings heard evidence in

this connection, upon consideration of such evidence and the reports of certain of its officers, and pursuant to the powers conferred on it by sections 30 and 269 of the Railway Act, issued on November 25, 1908, an order containing the following provisions:—

1. Every locomotive steam engine operated in the province of Ontario by any railway company subject to the legislative authority of the parliament of Canada, shall be equipped so as to prevent the unnecessary and unreasonable omission therefrom to the atmosphere of dense or opaque smoke and every such locomotive steam engine shall, subject to clauses 2, 3, 4 and 5, while passing through or being operated within any city, town or village, be so operated as not to permit the unnecessary and unreasonable emission to the atmosphere of dense or opaque smoke.

2. Where it is necessary to clean out the fire-box or build a new fire, the necessary and reasonable emission of dense or opaque smoke within any city, town or village may be permitted for a period not to exceed six minutes in any one hour.

3. The necessary and reasonable emission of dense or opaque smoke from a locomotive steam engine standing at stations or in station yards in cities, towns or villages, may be permitted for a period of one minute in any ten minutes of any one hour.

4. This order shall apply to and be in force only in such cities, towns and villages in Ontario that have passed or may hereafter pass, by-laws for the control, regulation or prohibition of dense or opaque smoke from stationary steam engines, or a by-law or by-laws to the like effect.

5. In the ascent of the Scarboro grade easterly out of Toronto, or the grade east and west out of Hamilton, the necessary and reasonable emission of dense or opaque smoke may be permitted for a period not to exceed ten minutes in any one hour.

6. Every company or person offending against the foregoing regulations, or any of them, shall be subject to a penalty of twenty-five dollars for every such offence.

7. This order shall take effect on January 1, A.D. 1909.

EQUIPMENT OF CARS WITH AIR BRAKES.

The Board having had under consideration the question of equipment of cars with air brakes, and having had the matter investigated and reported upon by one of its officers, pursuant to the powers conferred upon it by sections 30 and 269 of the Railway Act issued under date of November 25, 1908, an order containing the following provisions:—

(1) Every railway company subject to the legislative authority of the parliament of Canada is, and it is hereby forbidden to handle freight cars in through main line passenger trains, unless such freight cars are equipped with air-brakes, steel tired wheels and special trucks designed for use in through-passenger train service.

Provided, however, that every such company shall be at liberty to use such freight cars in its through-passenger service when its baggage cars, or freight cars, especially equipped as aforesaid, become disabled or unfit for use while in transit, and such cars only are available to receive the baggage or freight, as the case may be, to avoid unnecessary delay in forwarding the same. In this event, the cars must not be loaded beyond their marked capacity, and the speed of the train must not exceed thirty-five miles an hour.

(2) Every such railway company failing to comply with the foregoing requirements shall be liable to a penalty of not exceeding fifty dollars for every such offence.

EQUIPMENT OF PASSENGER COACHES WITH FIRE ETINGUISHERS.

The Board having had under consideration an application of the Canadian Pacific Railway Company to amend order of the Board No. 3238, dated July 3, 1907, requiring the railway companies in Canada subject to the jurisdiction of the Board to equip passenger coaches with two fire extinguishers, upon the report and recommendation of its Inspector of Railway Equipment and Safety Appliances, issued an order under date of May 5, 1908, varying order No. 3238, aforesaid, by permitting the railway companies to equip their passenger coaches with one fire extinguisher instead of two. The order also provides that unless the Board further directs, the equipment of said passenger coaches with one fire extinguisher shall be taken to be, and deemed, a compliance with the said order No. 3238.

PROTECTION OF BRIDGES.

The question of the protection of wooden trestles from fire during the months of the year in which fires were likely to occur having received a good deal of consideration at the hands of the Board, more particularly in connection with accidents the result of wooden trestles or wooden bridges having been burnt, the Board, pursuant to the powers conferred upon it by sections 30 and 269 of the Railway Act, issued the following order:—

Order No. 5103.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Thursday, the thirtieth day of July, A.D. 1908.

PRESENT:

Hon. J. P. MABEE, *Chief Commissioner.*
Hon. M. E. BERNIER, *Deputy Chief Commissioner.*
JAMES MILLS, *Commissioner.*

In pursuance of the powers conferred upon it by sections 30 and 269 of the Railway Act, and of all other powers possessed by the Board in that behalf,—

The Board doth order and direct, that every railway company subject to the legislative authority of the parliament of Canada, operating by steam power any railway or railways, any part or parts of which is or are constructed of or upon wooden trestles, do, during the months of May, June, July, August, September and October of each year, provide, place and keep a watchman, track-walker, fire alarm signals, ballast flooring, or fire-proof paint, as hereinafter directed, for the purpose of protecting the said trestles from fire, and thereby preventing trains from being burned, derailed or otherwise damaged at or on such trestles, each such company being allowed the option of adopting any one of the said foregoing methods of protection:—

1. Every such company shall place and maintain at each end of every wooden trestle on its line or lines of railway a barrel of a capacity not less than forty-five gallons; and on every such trestle over 200 feet in length, every such company shall place and maintain barrels of similar capacity at distances of not less than 150 feet—provided, however, that pile trestles over streams or other bodies of water need not be furnished with any such barrels.

2. Every such company shall keep and maintain the said water barrels in good repair and good condition for holding water, and see that they are kept full of water at all times.

3. Every such company shall remove all brush and dead grass from beneath and around every such trestle, and keep the whole width of its right of way under and along every such trestle free from all kinds of combustible material.

4. Every such special watchman or track-walker, on or in the neighbourhood of timber lands and in localities distant from settlement, shall carry a pail or satisfy himself that a pail is at each of the different trestles under his care, in such a place that it cannot be taken away or used for any other purpose than that for which it was provided.

5. Where the protection provided is by a track-walker, all trestles, long and short, shall be regularly inspected, two inspections to be made every twenty-four hours on main lines, and one every twenty-four hours on branch lines.

6. Every such special watchman or track-walker, whenever any such trestle is injured by fire, shall, as soon as possible thereafter, report the same to the roadmaster on whose division he is working; and in the event of any such barrel or pail not being in good and efficient condition for the holding of water, every such special watchman or track-walker having charge of the same shall promptly report such condition to the said roadmaster; and whenever the height of water in any such barrel is lowered by evaporation or otherwise, say ten inches from the top of the barrel, every such special watchman or track-walker shall promptly report such condition to the said roadmaster.

7. Every such railway company failing or neglecting to comply with any of the foregoing regulations shall be subject to a penalty of thirty dollars.

8. Every such special watchman or track-walker failing or neglecting to make inspection of any such trestle in accordance with the foregoing regulations, or failing or neglecting to make any of the reports hereinbefore required of him and as so required, shall be subject to a penalty of fifteen dollars for each such failure or neglect.

9. That the order of the Board No. 3239, dated the 3rd day of July, A.D. 1907, be and the same is hereby rescinded.

(Sgd.) J. P. MABEE,
Chief Commissioner,
Board of Railway Commissioners for Canada.

LIGHTING OF RAILWAY CARS.

The Board after having given considerable care and consideration to the question of the lighting of cars, and having had the matter investigated and reported upon by certain of its officers, pursuant to the powers conferred upon it by sections 30 and 269 of the Railway Act, issued an order, effective on and after the first of January, 1909, relative to the lighting of railway cars, providing as follows:—

1. That every railway company subject to the legislative authority of parliament of Canada, operating a railway by steam power, cause, subject to any exception or exceptions hereinafter contained in this order, the equipment of each and every car requiring lighting used on the railway or portion of railway operated by it, with one of the following lighting systems, namely:—

(*a*) The Pintsch Compressed Oil-Gas System.

(*b*) Acetylene gas, under what is known as the 'Absorbent or Commercial Acetylene System.'

2. That the Pintsch Compressed Oil-Gas System may be used subject to and upon the terms and conditions following, namely:—

(*a*) That the tanks be tested and tight at three hundred (300) pounds pressure to the square inch; and that they stand such tests without distortion: Provided that where, at the original date of issuance of this order, any railway company may have had in use tanks tested to a pressure not exceeding two hundred

and ninety-four (294) pounds to the square inch, it shall be sufficient that the tanks be tested and tight at two hundred and ninety (290) pounds pressure to the square inch, and that they stand such tests without distortion;

Provided, further, that when, at any date subsequent to the original date of issuance of this order, any railway company instals the Pintsch system on its cars, or where any railway company already using the Pintsch system instals new tanks, the said tanks shall, in each and every case, meet the requirement that they be tested and tight at three hundred (300) pounds pressure to the square inch, and that they stand such tests without distortion.

(*b*) That the maximum working pressure be one hundred and fifty (150) pounds to the square inch.

(*c*) That every gas tank attached to a railway car, be equipped with an extra heavy stud valve securely fastened to every such tank.

(*d*) That the equipment necessary for the installation of the said system be provided with—

(*d*1) A pressure gauge with a dial reading either from one pound to three hundred pounds, or reading by atmospheres from zero to fifteen atmospheres, to show the exact pressure of gas carried.

(*d*2) A recharging valve to attach to the charging station hose.

(*d*3) A regulating valve, to reduce the pressure of gas contained in the tank before it enters the main line piping and lamps on the car.

(*e*) That all piping between the regulating valves and stud valves be of extra heavy seamless steel or iron tubing; and that all elbows or tees be of extra heavy fitting, provided that heavy flange brass fittings may be used in lieu of such equipment.

(*f*) That the high pressure piping and fittings be carefully threaded before being screwed together—the pipe thread to be carefully tinned after being screwed up, and the piping to be sweated to the fittings.

(*g*) That standard tubing be used to connect the low pressure side of the regulating valve with the lamps of the cars; and that a main line cock, to turn on and off the gas, be placed on the inside of each car in a convenient and conspicuous location.

(*h*) That, in order to locate leakages, soap suds be used; and that lighted matches or torches be not used for this purpose.

(*i*) That printed regulations defining and explaining the use of the system be posted inside of each car, in close proximity to the main line cock; and that a tank stud valve key, a main line cock key, and such other keys as may be necessary for the use and operation of this equipment, be supplied to and always carried by all conductors and brakemen while on duty in charge of any train or cars provided with this equipment; and that the regulations required by this section to be posted up, shall state that such keys are in the possession of the conductor and brakeman or brakemen of the said trains or cars.

(*j*) That every car lighted by this system be placed under the charge of a competent and reliable employee of the railway company using such system—every such employee to be specially instructed in regard to the proper working and operating of the same.

3. That the acetylene, or what is known as the 'Absorbent or Commercial Acetylene Storage System,' may be used, subject to and upon the following terms and conditions, namely:—

(*a*) That the tanks used in connection with the said system be properly safeguarded against the possibility of explosion, and to be tested and tight at four times the maximum working pressure, and be able to stand such test without distortion; and that the said tanks be protected by an effective and durable preventative of rust.

(*b*) That the service tank pressure do not exceed one hundred and fifty (150) pounds to the square inch.

(*c*) That the acetylene gas be compressed; and that where tanks are charged elsewhere than at the generating station, plans showing in detail the location of all appliances used in connection therewith, including intended location of cars, be submitted to the Board for its approval, all gas to be thoroughly dried and purified.

(*d*) That car equipment be inspected and tested at least once every six months.

(*e*) That generators, charging apparatus and other details, be under expert supervision at all times.

(*f*) That acetylene gas generators be not installed in or upon cars or other railway rolling stock, except by leave of the Board.

(*g*) That every gas tank attached to a railway car be equipped with an extra heavy stud valve securely fastened to every such tank.

(*h*) That the equipment necessary for the installation of the said system be provided with—

(1) A pressure gauge with a dial reading from one pound to 300 pounds to the square inch, to show the exact pressure of gas carried.

(2) A recharging valve, to attach to the charging station hose.

(3) A regulating valve, to reduce the pressure of gas contained in the tank before it enters the main line piping and lamps on the cars.

And it is ordered and directed, That every such railway company may use free acetylene as a lighting medium, providing the same is not used under a pressure greater than ten pounds to the square inch; every such equipment to be submitted for and subject to the approval of the Board.

That these regulations neither prohibit the lighting of cars by electricity nor prevent or affect the lighting with what is known as 'Mineral Seal Lamp Oil.' On application the Board may, after a test has been conducted by the Board's Inspector of Railway Equipment and Safety Appliances, authorize the use of other oil or oils for car lighting. Any railway company or companies making application for such authorization must, at the time when such application is made, furnish samples of the said oil or oils to the said inspector for testing purposes.

That every railway company committing any breach of or failing to comply with any of the foregoing provisions be, for each such offence, liable to a penalty of one hundred dollars.

That every railway official or employee charged with any duty in respect of any of the matters aforesaid, who shall commit any breach of, or shall neglect to comply with the foregoing provisions, be liable to a penalty of twenty dollars for each such offence.

That these regulations take effect on and after the first day of January, 1909.

JUDGMENTS OF THE BOARD.

A summary of the principal judgments delivered by the Board for the year ending March 31, 1908, prepared by the law clerk, Mr. A. G. Blair, will be found under Appendix 'D.'

ROUTINE WORK OF THE BOARD.

RECORD DEPARTMENT.

Since the publication of the last report, this department has been placed under the charge of Mr. E. W. McNeill, who assumed his duties as Record Officer on March 1, 1909. Previous to Mr. McNeill's appointment, the department was under the

supervision of the Secretary of the Board, who, under the Board's authority, had delegated the working out of all details in this connection to Mr. A. E. Ecclestone, his secretary. Owing, however, to the large increase in the work of the Commission in connection with the secretary's department, it was found impossible for either the secretary or for Mr. Ecclestone to give that care and attention which is absolutely essential in connection with the proper keeping of the Board's records. Before taking over his duties as Record Officer the Board deemed it desirable, on the suggestion of the secretary, that Mr. McNeill in company with Mr. Ecclestone should make a personal inspection of the system of keeping records adopted by the State Commissions of Maine and the State of New York and the Interstate Commerce Commission at Washington and authorized their visiting Boston, New York and Washington, in the month of March last, which they accordingly did, deriving therefrom much information of use to them in this work. By reference to the subjoined table, it will be seen that the number of applications and filings received and orders issued for the past year have materially increased, more particularly the orders, which have increased approximately 25 per cent.

With regard to the cases heard by the Board at sittings during the year covered by this report, it might be mentioned that.....folios of testimony were taken by the Board at these sittings. The following is a table of formal applications (including informal complaints) received under the Act, documents filed and orders issued by the Board, compared with those for the year ending March 31, 1908.

—	April 1, '07 to March 31, '08.	April 1, '08 to March 31, '09.	Increase.
Applications, including 464 informal complaints	3,125	3,479	3 54
Filings (including outgoing letters)	45,425	51,913	6,488
Orders issued	1,787	2,249	462

The outgoing letters numbered 23,530.

It will be noted that the above does not include correspondence or filings of the other departments of the Board, such as the Traffic Department, for which see Appendix B.

INFORMAL COMPLAINTS.

It is desirable to call attention to the large number of informal complaints dealt with by the Board. These number some 464. The applications heard at the public sittings of the Board, and so disposed of, number some 737, deducting this number from the total of 3,479 applications filed with the Board, it will be noted, that approximately 2,742 applications including the informal complaints, were disposed of without the necessity of a hearing.

SECRETARY'S DEPARTMENT.

Since the publication of the last Annual Report, the office of Assistant Secretary to the Board has been created by the appointment of Mr. E. A. Primeau, formerly registrar and accountant, to this position, by virtue of order in council dated the first day of July, 1908.

It was considered desirable that there should be an assistant secretary to the Board, having a thorough knowledge of French, whose chief duty would be to deal with all French correspondence connected with the Board. In addition to the duties assigned to him by the Board, Mr. Primeau has still charge of the Accounting Department.

TRAFFIC DEPARTMENT.

No increase has been made in the staff of this department since the publication of the last report. One resignation has taken place, namely, that of Mr. C. N. Ham, and the vacancy caused by his resignation has not yet been filled. The Board has, however, made recommendation to the Governor in Council to fill the vacancy. The statement of the freight, passenger, telephone and express schedules filed with the Board between April 1, 1908, and March 31, 1909, will be found in conjunction with the report of the Chief Traffic Officer of the Board under Appendix 'B.'

ENGINEERING DEPARTMENT.

As stated in the last annual report, the Board had under consideration the appointment of an additional engineer, and Mr. N. Cauchon was appointed to the position under date of an order in council, 1st day of May, 1908, as assistant engineer with headquarters at Ottawa. A list of the examinations and inspections made by the engineering department for the year ending March 31, 1909, will be found under Appendix 'F.'

ACCIDENT DEPARTMENT.

As stated in the previous report, the Board has had under consideration the reorganization of this department, with the two-fold object in view of, first, securing greater promptness in dealing with accidents, and, secondly, of reducing expenses in connection with the holding of investigations. The Board, therefore, passed a regulation allotting certain provinces of the Dominion to certain inspectors, who should report to and be under the immediate supervision of a Commission. The following was the apportionment made:—

The province of Ontario, not including Port Arthur or west of Port Arthur, to be assigned to Inspectors Jas. Ogilvie and Jas. Clarke, having their headquarters at Ottawa, and to be under the supervision of the Assistant Chief Commissioner, D'Arcy Scott.

The province of Quebec and the maritime provinces to be assigned to Inspector E. C. Lalonde, having his headquarters at Montreal, and to be under the supervision of the Deputy Chief Commissioner, the Hon. M. E. Bernier.

The provinces of Manitoba and Saskatchewan and Ontario, from and including Port Arthur westward, to be assigned to Inspector W. S. Blyth, having his headquarters at Winnipeg, and to be under the supervision of Commissioner S. J. McLean.

The provinces of Alberta and British Columbia to be assigned to Inspector M. J. McCaul, having his headquarters at Calgary, Alta., and to be under the supervision of Commissioner Jas. Mills.

It was also provided that no expense for witness fees or detention of witnesses is to be incurred unless by direction of a Commissioner, and that in the absence from Ottawa of the Commissioner having supervision of the particular district, such direction might be given by any member of the Board. It was further directed that the Board or a Commissioner might at any time require any inspector or inspectors to make any special report upon any question or matter without reference to the assignment of the inspector to the particular province or district. Each Commissioner was authorized to deal with all reports upon matters in the provinces assigned to him, or to refer the same to the Board. In addition to dealing with accidents, the inspectors are to report on railway equipment and rolling stock. This arrangement came into

force in the month of December, 1908, and it is expected that satisfactory results will follow the arrangement outlined. The report of accidents investigated, covering the year ending March 31, 1909, will be found under Appendix 'G.'

OFFICES OF BOARD.

Owing to the increase in the number of the Commissioners from three to six, and the consequent increase in the staff of the Board, the Board finds that its present quarters, which were inadequate and ill-adapted, particularly as regards light and ventilation for offices, before such increase, are now very much more so, causing the Board a good deal of inconvenience and also militating against the effective carrying on of the work of the Board, which has largely increased during the last two years. It is, therefore, very necessary that the Board should have increased accommodation at an early date, in fact, in order to meet the present requirements of the Board, and to provide for the future requirements, double the accommodation now at the Board's disposal is required.

The Board, therefore, trusts that this matter will receive early attention at the hands of the government, and a suitable suite of offices provided.

COMMISSION.

As will be noted by reference to the first portion of the report dealing with amendments to the Railway Act, the number of the Commissioners has been increased from three to six. One of the Commissioners thus created, was designated Assistant Chief Commissioner, and having all the powers of the Chief Commissioner, with the limitation, that such powers shall not be exercised by him except in the absence of the Chief Commissioner. The following were the appointments made by the Governor in Council to fill the positions so created.

That of Assistant Chief Commissioner was filled by the appointment of Mr. D'Arcy Scott, barrister, Ottawa, by order in council, dated the 17th day of September, 1908. Mr. Scott, was at the time of his appointment, senior member of the firm of Scott & Curle, barristers of Ottawa, and mayor of the city of Ottawa, which office he resigned after his appointment to the Board. Mr. Scott received his education at Ottawa University, Ottawa, and Osgoode Hall, Toronto, Ont.

That of Commissioner, by the appointment of the Hon. Thomas Greenway of Crystal City, Manitoba, by order in council, dated the 17th day of September, 1908.

That of Commissioner, by the appointment of Simon James McLean, M.A., L.L.B., Ph.D., by order in council, dated the 17th day of September, 1908. Mr. McLean was, at the time of his appointment, professor in that branch of the Department of Political Economy in Toronto University having special reference to transportation and commerce. In 1901, he was appointed by the Dominion government, a Commissioner to report on railway rate grievances, and investigated the rates complained against in Canada, his report being published in the year 1902; and it was on the basis of the recommendations set forth in his report that the legislation providing for the organization of the Board of Railway Commissioners was drafted and embodied in the Railway Act, 1903. He also acted in an advisory capacity to Mr. A. S. White, K.C., ex-Attorney General of New Brunswick, now Judge of the Supreme Court of New Brunswick, who was commissioned by the Dominion government to draft the Bill embodying the provisions of the Railway Act, 1903. It should also be mentioned that Mr. McLean, during the years 1899 and 1901, prepared a report to the late Hon. A. G. Blair, who held at that time the portfolio of Minister of Railway and Canals, on railway commissions and their work, in England and the United States.

The Commissioners took office shortly after their appointment with the exception of the Hon. Thomas Greenway, who, on his arrival in the city of Ottawa, was taken ill and died within a short time afterward, his death, under the circumstances, being peculiarly sad. The vacancy caused by his death has not been filled by the appointment of a successor.

J. P. MABEE,
Chief Commissioner.

D'ARCY SCOTT,
Assistant Chief Commissioner.

M. E. BERNIER,
Deputy Chief Commissioner.

JAMES MILLS,
Commissioner.

S. J. McLEAN,
Commissioner.

March 31, 1909.

APPENDIX A.

STAFF OF THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA FOR THE YEAR ENDING MARCH 31, 1909.

TRAFFIC DEPARTMENT.

Name.	Occupation.	Appointment.	Amount.
			$ cts.
James Hardwell	Traffic expert	June 22, 1904	3,800 00
A. F. Dillinger	Operating assistant	April 6, 1907	1,800 00
G. A. Brown	Chief clerk	Oct. 3, 1904	2,000 00
C. E. McManus	Clerk	Sept. 1, 1904	1,050 00
C. C. Routhier	"	Aug. 14, 1906	1,050 00
C. N. Ham	"	Oct. 3, 1904	1,000 00
H. W. Messinger	"	July 8, 1904	950 00
J. S. Allen	"	May 6, 1907	900 00
G. T. Riddell	"	" 1, 1905	800 00
F. Lalonde	"	" 6, 1907	900 00
J. R. Usher	"	" 6, 1907	750 00
C. Chapman	"	April 11, 1907	600 00
			15,620 00

ENGINEERING DEPARTMENT.

G. A. Mountain	Engineer	June 30, 1904	4,800 00
T. L. Simmons	Assistant engineer	Oct. 3, 1904	2,500 00
H. A. K. Drury	"	June 25, 1906	2,500 00
N. Cauchon	"	July 1, 1908	2,500 00
John Murphy	Electrical engineer	May 15, 1906	1,500 00
J. R. Foulds	Clerk	Oct. 14, 1906	800 00

RECORD DEPARTMENT.

E. W. McNeill	Record officer	Feb. 8, 1909	1,500 00
J. W. Thompson	Clerk	Sept. 1, 1904	1,150 00
C. S. Huband	"	May 1, 1905	900 00
W. A. Jamieson	"	Aug. 14, 1906	750 00
J. E. Martin	"	May 6, 1907	700 00
T. G. Britton	"	" 6, 1907	700 00
D. I. Langelier	"	July 20, 1904	650 00
F. R. Demers	"	Aug. 14, 1905	600 00

SECRETARY'S DEPARTMENT.

Name.	Occupation.	Date of Appointment.	Amount.
			$ cts.
E. A. Primeau	Assistant secretary	May 7, 1904	2,500 00
A. E. Ecclestone	Secretary to secretary	Aug. 14, 1906	1,100 00
J. B. Arbick	Clerk	Dec. 23, 1904	700 00
G. F. Periey	Clerk and stenographer	Jan. 2, 1908	600 00
A. Larocque	" "	Dec. 31, 1908	700 00
A. Lapointe	Clerk	May 6, 1907	700 00
B. Chevrier (Miss)	Stenographer	July 20, 1904	900 00
E. A. H. Barber (Miss)	"	May 8, 1907	550 00

ACCIDENT AND EQUIPMENT DEPARTMENT.

E. C. Lalonde	Inspector	July 20, 1904	2,200 00
Jas. Ogilvie	"	May 4, 1907	2,200 00
M. J. McCaul	"	" 6, 1907	2,100 00
W. S. Blythe	"	" 6, 1907	2,100 00
Jas Clarke	"	" 6, 1907	1,800 00

LAW DEPARTMENT.

A. G. Blair	Law clerk	July 20, 1904	2,500 00
R. Larose (Miss)	Stenographer and librarian	May 1, 1905	750 00

PRIVATE SECRETARY TO CHIEF COMMISSIONER.

R. Richardson		May 1, 1905	1,600 00

STENOGRAPHERS.

E. N. Cameron (Miss)		July 20, 1904	700 00
M. Hache (Miss)		Dec. 31, 1907	500 00
L. J. Lewis (Miss)		May 7, 1904	750 00
G. M. O'Connor (Miss)		Dec. 31, 1908	550 00
N. Casey (Miss)		" 31, 1908	700 00

MESSENGERS.

T. Chandler	Chief messenger and court usher	May 15, 1904	800 00
J. Dionne	Messenger	" 27, 1907	500 00
T. D. Latour	"	Dec. 31, 1907	500 00
E. S. Barbeau	"	" 31, 1907	500 00

CAR 'ACADIA.'

Geo. Taylor	Cook		720 00

APPROPRIATIONS, EXPENDITURES AND RESOURCES.

Appropriations.		Expenditure during 12 months from April 1, 1908.	Unexpended Balance.
		$ cts.	$ cts.
Amount allowed by statute for salaries of members of commission and secretary..	$ 55,000 00	39,499 16	15,500 84
Amount voted by parliament for maintenance and operation of the board	103,000 00	94,623 72	8,376 28
Amount voted by parliament to pay expenses in connection with reference to cases before Railway Commission.....	10,000 00	2,846 29	7,153 71

Certified correct,

EUG. A. PRIMEAU,

Assistant Secretary.

Ottawa, April 1, 1909.

APPENDIX B.

REPORT OF THE CHIEF TRAFFIC OFFICER OF THE BOARD.

OTTAWA, May 21, 1909.

SIR,—I have the honour to submit the report of the traffic department of the Railway Commission to March 31, 1909.

Subjoined is a statement of the freight, passenger, express and telephone schedules filed with the Board between November 1, 1904, when, by the order of the Board, under the authority of section 311 of the Railway Act, 1903, the railway companies commenced filing their tariffs, and March 31, 1909, and from April 1, 1908, to March 31, 1909, inclusive:—

GRAND TOTAL OF ALL SCHEDULES RECEIVED FROM NOVEMBER 1, 1904, TO AND INCLUDING MARCH 31, 1909.

Freight—			
Local tariffs	3,030		
Supplements	4,120	7,150	
Joint tariffs	5,886		
Supplements	13,276	19,162	
International tariffs	20,884		
Supplements	52,519	73,403	
			99,715
Passenger—			
Local tariffs	2,580		
Supplements	1,671	4,251	
Joint tariffs	1,150		
Supplements	1,262	2,412	
International tariffs	5,015		
Supplements	3,812	8,827	
			15,490
Express—			
Local tariffs	2,119		
Supplements	10,477	12,596	
Joint tariffs	1,010		
Supplements	4,547	5,557	
International tariffs	1,541		
Supplements	474	2,015	
			20,168
Telephone—			
Local tariffs	673		
Supplements	396	1,069	
Long distance tariffs	1,121		
Supplements	444	1,565	
International tariffs	304		
Supplements	1,604	1,908	
			4,542
Combined totals, all schedules			139,915

TARIFFS AND SUPPLEMENTS RECEIVED FROM APRIL 1, 1908, TO AND INCLUDING MARCH 31, 1909.

Freight—			
Local tariffs	664		
Supplements	1,164	1,828	
Joint tariffs	1,803		
Supplements	4,551	6,354	
International tariffs	4,349		
Supplements	13,850	18,199	
			26,381
Passenger—			
Local tariffs	788		
Supplements	730	1,518	
Joint tariffs	315		
Supplements	670	985	
International tariffs	1,283		
Supplements	1,439	2,722	
			5,225
Express—			
Local tariffs	451		
Supplements	6,621	7,072	
Joint tariffs	313		
Supplements	3,251	3,564	
International tariffs	109		
Supplements	205	314	
			10,950
Telephone—			
Local tariffs	18		
Supplements	24	42	
Long distance tariffs	35		
Supplements	80	115	
International tariffs	4		
Supplements	733	737	
			894
Combined totals, all schedules			43,450

The following are the more important orders and regulations relating to traffic issued by the Board to March 31, 1909, namely:

March 9, 1904.—Order permitting railway companies to continue their reduced fares to clergymen; also to students of universities, colleges and schools, to and from their homes.

June 28, 1904.—Reduction ordered in the rates on oiled clothing in carloads from Toronto to Halifax, Winnipeg and Calgary.

July 16, 1904.—Canadian Freight Classification No. 12, with supplement No. 1 and ruling circular No. 1, approved.

July 30, 1904.—Order reducing rates on cooperage stock in carloads.

July 30, 1904.—Railway companies ordered to cease charging prohibitive rates on cedar lumber, ties, &c., and to substitute tolls which shall not discriminate between cedar and other woods; also to amend the Canadian Freight Classification by including rails, fence posts, telegraph poles and ties with other forest products, instead of carrying these commodities, as formerly, by 'special contract' only.

July 30, 1904.—Railway companies directed to reduce their rates on glass bottles, in carloads, from Wallaceburg, Ont., to Toronto, Hamilton, Berlin, London and Montreal.

October 3, 1904.—Order regarding special rates on material and machinery for new industries. Companies directed to report applications to the Board, which will deal with each on its merits.

October 3, 1904.—Application of Grand Trunk Railway Company for permission to charge a less rate on coal to Cobourg, Ont., for manufacturing purposes than charged to ordinary consumers and dealers declined.

October, 1904.—Reduction ordered in the rates on coal from the Niagara and Detroit frontiers to Almonte.

October 10, 1904.—Application of the United Factories for a special rate on logs, Penetanguishene to Newmarket, Ont., declined.

October 10, 1904.—Order revising and reducing the classification of fruit, and prescribing a maximum charge for icing fruit cars in transit.

October 10, 1904.—Order reducing rate on split peas, for export, to the same basis as flour, for export.

October 31, 1904.—Railway companies directed to desist from charging higher rates on cedar lumber from the mills in British Columbia than charged on pine, fir and spruce.

December 29, 1904.—Disallowance of certain advanced freight tariffs on grain products from Ontario to the maritime provinces, which had been issued without legal notice. Companies directed to make restitution to shippers.

February 9, 1905.—Conditions prescribed under which railway companies may make and report to the Board special rates in certain cases, under section 275 of the Railway Act, 1903.

February 9, 1905.—Order prescribing under what circumstances the Board will receive telegraphic notices of proposed changes in freight rates under emergency conditions.

February 9, 1905.—Canadian Northern Railway Company authorized to carry material and machinery for new industrial works at Fort Frances, Ont., at reduced rates.

March 6, 1905.—Lower rates ordered on cattle from Ontario points to Montreal, St. John, West St. John and Portland, for export, so as to bring them more into harmony with those paid by United States shippers.

April 15, 1905.—Railway companies ordered to discontinue charging higher rates on grain between local points in Ontario and Quebec than charged on flour and other grain products between the same points.

June 2, 1905.—Preferential coal rates from Port Stanley and Rondeau, Ontario, ordered discontinued.

July 5, 1905.—Restoration ordered of rates formerly charged on metallic shingles, the increase of which had checked shipments.

July 13, 1905.—Cartage and other allowances by railway companies to shippers to offset disadvantages of location ordered discontinued, unless published in the companies' tariffs.

July 25, 1905.—Grand Trunk Railway Company ordered to provide reasonable and proper facilities for the interchange of traffic at London, Ont., and its tolls prescribed for switching traffic to and from the Canadian Pacific Railway.

July 25, 1905.—Reduction ordered in rates from Ontario on all freight traffic to Montreal, Quebec and the Atlantic seaboard, for export.

September 5, 1905.—Railway companies required to place their rates on coal from frontier ports of entry and lake ports to interior points in Ontario on an equal mileage basis.

1905.—Equalization of freight rates ordered to points between North Bay and Sault Ste. Marie, Ont., as between Toronto and Collingwood shippers.

September 19, 1905.—Order reducing rate charged at New Westminster, B.C., for switching grain to the distillery at Sapperton, and prescribing switching tolls within the New Westminster terminals.

October 14, 1905.—Reduced rates prescribed on stone from Manitoba quarries to Winnipeg.

October 17, 1905.—Canadian Pacific and Canadian Northern Railway Companies ordered to interchange carload freight without transhipment at Winnipeg and St. Boniface, Man., for shipment from or delivery at those points.

October 31, 1905.—Reduced rates ordered on beams, in carloads, from shipping points in Ontario.

November 15, 1905.—Provision made for the fair distribution of empty cars at Lake Huron and Georgian Bay ports, for the movement of Northwest grain during car shortage.

November 28, 1905.—Interchange facilities ordered at Lindsay, Ontario, between the Grand Trunk and Canadian Pacific Railways, and tolls prescribed for switching local traffic.

December 14, 1905.—Reduced rates prescribed on extra compressed hay and fodder in carloads, from Grand Trunk and Canadian Pacific Railway stations in Quebec to Atlantic ports north of and including Boston, for export.

December 14, 1905.—Ordered that rates on grain and grain products, in carloads, from points west of Montreal to and including Cornwall and Finch, Ont., and south of the St. Lawrence in the counties of St. Johns, Laprairie and Napierville, Chateauguay and Huntingdon, to points east of Lévis, province of Quebec, shall not exceed the rates from Montreal to the same points by more than 2 cents per 100 pounds, nor by more than the differences existing at date of order.

January 6, 1906.—New car service or 'demurrage' rules, more favourable to the public than the old, promulgated by the Board for use on all railways subject to its jurisdiction.

February 14, 1906.—Order reducing the rate charged by the Red Mountain Railway Company for switching ore at Rossland, B.C., for the Trail smelter.

February 14, 1906.—Reduction ordered in the rate on grain, in carloads, from the Canadian Pacific Company's elevator at Owen Sound to unloading sidings within the company's terminals at the same place.

February 19, 1906.—Canadian Northern Railway Company directed to replace the siding to Messrs. Robinson & Son's coal and wood yard at Winnipeg, which had been removed.

March 24, 1906.—Reduced minimum carload weights prescribed for freight loaded in box cars longer than the standard length of 36 feet 6 inches.

March 24, 1906.—Additions ordered to the articles which may be shipped in mixed carloads at carload rates.

March 24, 1906.—Reductions in minimum chargeable weight for light and bulky articles requiring platform cars for carriage.

May 21, 1906.—Promulgation of additional regulations relating to the publication and filing of freight and passenger tariffs.

June 6, 1906.—The minimum carload weight of charcoal authorized by the Canadian Freight Classification not to be exceeded in commodity tariffs. Revision of commodity rates from Sault Ste. Marie ordered accordingly.

June 29, 1906.—Reduced rates ordered on packing house products, in carloads, from packing point in Ontario to Montreal, for export.

July 18, 1906.—Tolls prescribed to be charged by the Canadian Pacific Railway Company for switching traffic interchanged with the Grand Trunk Railway Company for loading or unloading at London, Ont.

July 19, 1906.—Authority granted the Dominion Atlantic Railway Company to charge the express rate on fresh fish on special freight trains making express time, Halifax to Yarmouth, N.S., for export to Boston; when so consigned, and in quantities beyond the handling capacity of the express company.

July 31, 1906.—Renewal of the Montreal to Toronto westbound rate ordered on wall paper from Toronto to Montreal and Ottawa, and as the maximum to intermediate points, with corresponding reductions to points east of Montreal.

August 1, 1906.—Order supplementing order of July 30, 1904, requiring the carriage of railway ties to Canadian points at rates not exceeding the non-competitive special tariff rates on common lumber; also to United States joint rate points. Order

of July 30, 1904, against the Kingston and Pembroke Railway Company made applicable to all railway companies.

August 11, 1906.—Railway companies ordered to abolish the additional arbitrary rate of 5 cents per 100 pounds hitherto charged to British Columbia coast points on transcontinental traffic from eastern Canada; also to substitute the minimum carload weights of the Canadian Freight Classification for the higher minima previously charged on the said traffic when loaded in cars longer than the standard car of 36 feet 6 inches; also to reduce the weight allowance on lumber used for bracing or otherwise safeguarding carload shipments of the said transcontinental traffic requiring such protection, to the basis allowed elsewhere in Canada.

October 13, 1906.—Supplement No. 7 to Canadian Freight Classification No. 12, approved.

October 13, 1906.—Nelson and Fort Sheppard and Canadian Pacific Railway Companies ordered to furnish adequate and suitable accommodation and facilities for the carriage and interchange of lumber, shingles, &c., from Salmo and Ymir, B.C., to eastern Canadian points.

November 9, 1906.—Rates reduced and prescribed on freight traffic to rail points and lake ports of call in the district of Kootenay and Yale, B.C.

November 12, 1906.—Supplement No. 8 to Canadian Freight Classification No. 12, approved.

November 13, 1906.—Express companies' forms of contract temporarily approved, pending inquiry.

November 16, 1906.—Order amending order of February 14, 1906, regarding switching tolls to be charged by the Red Mountain Railway Company at Rossland, B.C.

November 19, 1906.—Promulgataion of regulations relating to the publication and filing of express tariffs.

November 19, 1906.—Grand Trunk and Canadian Pacific Railway Companies authorized, under certain conditions, to refund to exporters of cheese the tolls collected for cartage to the Montreal wharfs during the season of navigation, 1905, on joint application of the said railway companies and exporters.

December 6, 1906.—Promulgation of regulations relating to the publication and filing of tariffs of telephone tolls.

February 15, 1907.—Grand Trunk and Canadian Pacific Railway Companies authorized, under certain conditions, to refund to exporters of cheese the tolls collected for cartage to the Montreal wharfs during the season of navigation, 1906, on joint application of the said railway companies and exporters.

March 13, 1907.—Reduced rate prescribed on logs, in carloads, from Brule Lake, Ont., to Renfrew, Ont.

March 18, 1907.—Canadian Pacific and Grand Trunk Railway Companies ordered to reduce their passenger rates on all their lines in Canada, east of and including the line of the Calgary and Edmonton Railway Company, to a maximum basis of 3 cents per mile.

April 11, 1907.—Approval of Supplement No. 8 to Canadian Freight Classification No. 12.

April 12, 1907.—Telephone companies directed to file particulars of any free service or tolls lower than the published tariff tolls allowed by the Board, granted by them; also particulars of cases in which the service of the companies is given wholly or in part for considerations other than monetary payments.

April 24, 1907.—Extending the time fixed in order of December 18, 1906, to July 1, 1907, for the filing and approval of tariffs of express tolls.

May 22, 1907.—Granting leave to the St. John Ice Company, to institute legal proceedings against the New Brunswick Southern Railway Company for permitting

W. E. Scully to obtain lower rates of transportation than authorized or in force, and for transporting ice at less than the published tolls, in violation of the Railway Act.

May 23, 1907.—Further extending time for the filing and approval of express companies' tariffs until August 1, 1907.

May 23, 1907.—Time fixed by order of November 13, 1906, extended to August 1, 1907, authorizing the use of contracts, conditions, by-laws and regulations of express companies.

May 30, 1907.—Authorizing the Canadian Pacific Railway Company to grant reduced rate from British Columbia points to Montreal and return to members of Bisley team.

June 4, 1907.—Authorizing the Niagara, St. Catharines and Toronto Railway Company to reissue its Standard Freight Tariff with such additional mileages as are required to cover extensions to Welland and Niagara-on-the-Lake, and dismissing application of the company to conform to the Canadian Freight Mileage Tariff by advancing certain of the rates previously in force on the older lines.

June 7, 1907.—Extending the time for the approval of the Bell Telephone Company's tariffs of tolls until August 13, 1907.

June 11, 1907.—Additional extension of time for approval of tariffs of express companies to November 1, 1907, authorized.

June 22, 1907.—Approving form of general certificate of concurrence by express companies in Canada in joint tariffs of international express freight rates from points in the United States.

June 25, 1907.—Directing the Grand Trunk Railway Company to furnish cars and all proper facilities for receiving, loading and transporting import traffic received over the wharfs at Montreal, irrespective of cartage companies through whom the traffic is offered.

June 29, 1907.—Approving Canadian Freight Classification No. 13 (See Appendix).

July 2, 1907.—Ordering that the rate on imported iron and steel, in carloads, from Montreal harbour to Simplex Railway Appliance Company at Bluebonnets be 2½ cents per 100 pounds, including the service of checking the goods from the carter to the car.

July 3, 1907.—Approving Supplement No. 9 to Canadian Freight Classification No. 12.

July 4, 1907.—Requiring railway companies to furnish the Board with certain information regarding junction points and joint tariffs, preparatory to the consideration of joint tariffs generally.

July 5, 1907.—The Grand Trunk Railway Company ordered to issue third-class tickets at 2 cents per mile, and to run third-class carriages daily between Toronto and Montreal.

July 6, September 23, November 13, 1907.—International Rate Order. The Grand Trunk, Canadian Pacific, Michigan Central, Pere Marquette, Wabash, Toronto, Hamilton and Buffalo and Canadian Northern Ontario Railway Companies ordered to revise and republish their special local class freight tariffs (known as 'town tariffs') in the territory east of and including North Bay, and east of the Georgian Bay, Lake Huron and the St. Clair and Detroit rivers, and south of the Ottawa river, on a uniform and modified mileage scale prescribed by the Board; also to revise and republish their through freight rates from central and western Ontario to eastern Canadian points, the maximum rates from Canadian points on the Detroit and St. Clair river frontier to all points east to the Atlantic and north to the Ottawa river not to exceed the rates on international traffic from Detroit and Port Huron to the same points: the revised rates to become effective not later than January 1, 1908. (See Appendix D).

July 6, 1907.—Requiring the railway companies to furnish to the Board various particulars relating to their traffic operations, not covered by section 375 of the Railway Act.

July 17, 1907.—Authorizing the Canadian Pacific Railway Company to provide rates to British Columbia coast terminals on grain and mill stuffs, for export to Asia, by the issue of special rate notices.

July 26, 1907.—Standard passenger rate of Alberta Railway and Irrigation Company reduced to 4 cents per mile. Company also required to furnish return tickets for transportation of passengers at one and two-third times single fare.

August 6, 1907.—Vancouver, Westminster and Yukon Railway Company and the Canadian Pacific Railway Company ordered to furnish adequate and suitable accommodation and facilities for the carriage of traffic from points on the Vancouver, Westminster and Yukon Railway to points on the Canadian Pacific Railway.

August 6, 1907.—Crowsnest Southern Railway Company and the Canadian Pacific Railway Company ordered to furnish adequate and suitable accommodation and facilities for the carriage of traffic from points on the Crowsnest Southern to points on the Canadian Pacific Railway.

November 1, 1907.—Extending to March 1, 1908, the time for the filing and approval of the Bell Telephone Company's tariffs of tolls.

November 1, 1907.—Further extension of time to May 1, 1908, authorizing the use of existing contracts, conditions, by-laws and regulations of express companies.

November 1, 1907.—Extending the time for the filing and approval of the tariffs of tolls of the express companies, March 1, 1908.

November 1, 1907.—Extending the time for the filing and approval of the North American Telegraph Company's tariffs of tolls to March 1, 1908.

November 4, 1907.—The Grand Trunk Railway Company ordered to reduce its rates from Rouse's Point, New York, to Coteau Junction and St. Polycarpe, province of Quebec, to 80 cents per gross ton on anthracite and 70 cents on bituminous coal.

November 21, 1907.—Requiring the Grand Trunk Railway Company to change its tariff, C.R.C. No. E 425, so that the tolls to be charged upon the class of paper covered by said tariff from Merritton, St. Catharines and Thorold to Montreal shall not be greater than the rates published therein from Brantford to Montreal.

November 22, 1907.—Temporarily approving the bills of lading, contracts, &c., of the National and American Express Companies until March 1, 1908.

November 22, 1907.—Temporarily approving the bills of lading, contracts, &c., of the United States and Great Northern Express Companies until March 1, 1908.

December 10, December 28, 1907, January 15, January 30, 1908.—Orders relating to arrangements for proper connections for passenger and mail traffic at Brockville, to be furnished by the Grand Trunk and Canadian Pacific Companies.

December 17, 1907.—Temporarily approving the Pacific Express Company's contract forms until March 1, 1908.

December 19, 1907.—Approving certain traffic forms of the Maritime Express Company until March 1, 1908.

December 19, 1907.—Approving forms of contract for the transportation of live stock of the Nelson and Fort Sheppard, Vancouver, Victoria and Eastern and the Red Mountain Railways.

January 30, 1908.—Authorizing the chairmen of the official, western and southern classification committees to file with the Board copies of their freight classifications and supplements on behalf of United States railway companies which file international freight tariffs governed by these classifications.

February 26, 1908.—Extending till June 1, 1908, the time within which the North American Telegraph Company shall file and receive approval of its tariff of tolls.

February 26, 1908.—Extending till June 1, 1908, the time within which the Bell Telephone Company shall file and receive approval of its tariff of tolls,

February 26, 1908.—Extending till June 1, 1908, the time in which express companies in Canada shall file and receive approval of their tariffs.

Order No. 4533, March 25, 1908.—Railway companies authorized to issue to secretaries of railroad Y.M.C.A.'s located on their lines, of which their employees are members and for their household effects, free or reduced transportation, when travelling on secretarial duties or being transferred.

Order No. 4680, May 7, 1908.—Carload rating of third-class prescribed for books.

Order No. 4682, May 5, 1908.—Intercolonial and Grand Trunk Railway Company absolved from agreement with Canadian Pacific Railway *re* freight rates to Fredericton, New Brunswick, on traffic from points west of Montreal. St. John, New Brunswick, basis of rates restored to Fredericton.

Order No. 4781, May 27, 1908.—Grand Trunk Railway and Wabash Railroad Companies ordered to interchange passenger tickets between all stations in Ontario through which the railways of both companies run passenger trains.

Order No. 4784, April 23, 1908.—Grand Trunk and Canadian Pacific Railway Companies ordered to arrange with Canadian Northern Ontario Railway Company for joint tariffs of passenger tolls and facilities for passengers to and from non-competitive points on the Canadian Northern Ontario Railway.

Order No. 4796, May 29, 1908.—Fixing the toll to be paid the Michigan Central Railroad Company by the John Campbell Milling Company at St. Thomas, for switching their traffic received from and destined to points on or via Grand Trunk Railway and directing the Michigan Central Railroad Company to refund overcharges with interest.

Order No. 4884, June 17, 1908.—Revised classification of military stores and ordnance approved.

Order No. 4886, June 18, 1908.—Reduction and re-alignment of rates on sugar from Vancouver to points in Alberta, Saskatchewan and Manitoba, on complaint of British Columbia Sugar Refining Company.

Order No. 4988, July 8, 1908.—Prescribing uniform tolls for terminal interswitching services by all companies subject to the Railway Act.

Order No. 5117, July 30, 1908.—Permitting railway companies to file tariffs of tolls through outside agents, under powers of attorney filed with the Board.

Order No. 5774, December 3, 1908.—Authorizing Vancouver, Victoria and Eastern Railway and Navigation Company to meet on the Pacific Coast, by special competitive tariffs, the competition of independent water carriers not subject to the Railway Act.

Order No. 5954, December 21, 1908.—Directing railway companies to publish and file complete tables of distances between stations.

Order No. 5955, December 15, 1908.—Canadian Pacific Railway and Canadian Northern Railway Companies to publish and file joint tariff on grain and grain products from points on the line of the Qu'Appelle, Long Lake and Saskatchewan Railway and Steamboat Company to points in British Columbia.

Order No. 6147, January 21, 1909.—Limiting the stop-over toll that the Canadian Pacific Railway Company may charge on western grain and grain products held for orders at Cartier.

Order No. 6148, January 21, 1909.—Limiting the stop-over toll that the Grand Trunk Railway Company may charge on lumber and forest products held at Sarnia Tunnel for orders.

Order No. 6166, January 13, 1909.—Reducing the rates on western grain, ex vessel, from Kingston to points in Quebec and the maritime provinces.

Order No. 6167, February 4, 1909.—Directing express companies to carry acetylene gas, and prescribing condition of carriage.

Order No. 6168, February 3, 1909.—Reducing the rate on coal from Niagara frontier points to Lindsay, Ontario.

Order No. 6186, February 1, 1909.—Prescribing allowance to be made by railway companies to shippers who have to supply temporary grain doors to cars in which to ship grain.

Order No. 6242, February 8, 1909.—Prescribing form of release of responsibility for freight shipped to flag stations upon lines of all railway companies subject to the Railway Act.

Order No. 6612, February 23, 1909.—Prescribing a basis of joint rates on lumber and forest products from local points on the Vancouver, Westminster and Yukon Railway to points on the Canadian Pacific Railway west of Winnipeg not reached by the Great Northern Railway or its connections.

Order No. 6689, March 29, 1909.—Directing all railway companies subject to the Railway Act to file standard tariffs of maximum sleeping and parlour car tolls.

Order No. 6701, February 19, 1909.—Prescribing allowance to be made by railway companies to shippers who have to furnish temporary protective doors to enable cars to be used for shipments of coal.

Order No. 6702, March 25, 1909.—Directing that railway companies subject to the Railway Act shall not charge higher rates on wooden telegraph, telephone and trolley poles, between points east of Port Arthur, loaded on single cars, than they charge on lumber under non-competitive conditions; and prescribing basis of rates and minimum weights to be charged on poles requiring more than one car for shipment.

Order No. 6749, February 11, 1909.—Reducing rates on coal from Bienfait, Sask., to certain points in Manitoba and Saskatchewan.

Order No. 6763, February 19, 1909.—Prescribing allowance to be made by railway companies to live stock shippers who are not supplied with stock cars for live stock shipments, and have to furnish lumber for doors to box cars.

Order No. 6859, February 6, 1909.—Prescribing tolls to be charged by the Canadian Pacific and Canadian Northern Railway Company for interswitching grain held in transitu at Winnipeg for milling, treatment or storage and reshipment.

Certain standard freight tariffs of the undermentioned companies have been approved by the Board in accordance with section 327, The Railway Act, as follows:—

Order No. 4573, April 7, 1898.—Niagara, St. Catharines and Toronto Ralway Company's stations on new lines, omitting stations on main line between Port Dalhousie and Niagara Falls, Ont., C.R.C., No. 288.

Order No. 4684, May 7, 1908.—Klondike Mines Railway Company's standard freight tariff, C.R.C., No. 2.

Order No. 5024, July 7, 1908.—Supplement to Canadian Pacific Railway Company's standard freight tariff, C.R.C. No. E 1, applying on stations on new lines in Ontario (St. Mary's and Western Ontario Railway, Walkerton and Lucknow Railway and Listowel branch of Guelph and Goderich Railway.)

Order No. 5166, August 11, 1908.—Canadian Northern Ontario Railway Company's standard freight tariff, C.R.C., No. 74, applying between stations, Toronto and Sudbury.

Order No. 5168, August 13, 1908.—Canadian Pacific Railway Company, C.R.C.. No. E 1244, applying between stations, Toronto and Sudbury.

Order No. 5194, August 18, 1908.—Brantford and Hamilton Electric Railway Company's standard freight tariff, C.R.C. No. 1.

Order No. 5413, October 9, 1908.—Canadian Northern Railway Company's standard freight tariff, supplement No. 2 to C.R.C. No. 38 between stations west of and including Maryfield, Sask.

Order No. 5414, October 8, 1908.—Montreal Terminal Railway Company's standard freight tariff, C.R.C., No. 3.

Order No. 6087, January 18, 1909.—Grand Trunk Pacific Railway Company's standard freight tariffs, Nos. 2, 3 and 4; Winnipeg to Victor, Manitoba; Welby, Sask., to Wainwright, Alberta; Westfort, Ontario, to Lake Superior Junction, Ontario.

Order No. 6112, January 26, 1909.—Grand Valley Railway Company's standard freight tariff, C.R.C., No. 1.

The following standard passenger tariffs have been approved by the Board in accordance with section 331, The Railway Act:—

Order No. 5165, August 12, 1908.—Canadian Northern Ontario Railway Company, C.R.C., No. 26, between Toronto and Sudbury and Moose Mountain.

Order No. 5195, August 18, 1908.—Brantford and Hamilton Electric Railway, C.R.C., No. 1.

Order No. 5564, November 3, 1908.—Ottawa and New York Railway, C.R.C., No. 31, standard passenger tariff of bridge tolls for bridge section at Cornwall.

Order No. 5837, December 14, 1908.—Chatham, Wallaceburg and Lake Erie Railway Company, C.R.C., No. B 2, applying between Chatham and Erie Beach, Ontario

Order No. 5972, December 18, 1908.—Orford Mountain Railway Company's C.R.C., No. 20.

Order No. 6006, January 18, 1909.—Grand Trunk Pacific Railway Company's C.R.C., No. 2, stations east of Edmonton.

I have the honour to be, sir,
Your obedient servant,

J. HARDWELL,
Chief Traffic Officer.

A. D. CARTWRIGHT, Esq.
Secretary.

APPENDIX C.

LIST OF APPLICATIONS HEARD AT PUBLIC SITTINGS OF THE BOARD COVERING THE PERIOD FROM APRIL 1, 1908, TO MARCH, 1909.

861. Application of the Chatham, Wallaceburg and Lake Erie Railway Company, under section 261 of the Railway Act, for leave to operate its line of railway for the carriage of traffic in the city of Chatham, on the following streets, that is to say:—From Dover street along and upon Union street and the Aberdeen bridge to King street and on King street, and on Third street, Wellington street and Raleigh street, and from Raleigh street through park lot No. 6 to Queen street, and from Queen street on a private right of way to William street and on William street to Queen street; and also applies for leave to operate temporarily and until such time as the protection plant can be installed, the crossing of the Canadian Pacific Railway on Raleigh street and the crossing of the Grand Trunk Railway at William street. (Application 5548. Case 2491.)

NOTE.—The portion to be dealt with at this sitting is that relating to the temporary crossing of the Grand Trunk Railway at William street, Chatham, Ont.

Temorary order issued granting leave to cross until August 1, 1908:—

862. Application of the Canadian Northern Ontario Railway for an order, under section 178 of the Railway Act for authority to take the followinmg lands:—

1. That part of Park Drive located on lot 19, concession 2 F.B., in the township and county of York, lying east of the westerly limit of the right of way of the Toronto belt line railway, and extending to its junction with Bayview avenue deviation.

2. That portion of Bayview avenue extending northerly from a point thirty-three (33) feet south of the north limit of the city of Toronto to the junction with Bayview avenue deviation on lot 20 in the said concession; all of Bayview avenue deviation as located on lots 20, 19 and 18, in the said concession and about four hundred and fifty-nine and eight-tenths (459⅘) feet of Bayview avenue, measured northerly from the south limit of Bayview avenue deviation at its junction with Bayview avenue near the limit between lots 18 and 19 in the said concession.

3. A trespass road in the city of Toronto, on lots 15 and 16, concession 1 F. B., in the township and county aforesaid, extending northerly from Winchester street near the Canadian Pacific Railway subway to the south limit of Bayview avenue aforementioned, by substituting therefor a highway of sixty-six (66) feet in width, extending from the most northerly limit of that portion of Bayview avenue, herein sought to be closed to the north limit of Park avenue aforementioned, passing under and to the west of the right of way of the Toronto Belt Line Railway and a highway eighty (80) feet in width, extending from the south limit of Park drive aforementioned across lots 19 and 20, concession 2 and lot 16, concession 1 F. B., to the junction with the Rosedale ravine drive. (Application 5833. Case 2434.)

Judgment of the Board holding that the landowners are entitled to a voice in new location, and if by reason of a change in such location the company is unable to obtain conveyance of the lands covered by its agreement with the city the application fails.

863. Application of the Kingston and Pembroke Railway Company, under sections 227, 228 and 229 of the Railway Act for an order amending order of the Rail-

way Committee of the Privy Council, dated November 2, 1895, and order dated September 10, 1896, amending same and directing that the station master of the Kingston and Pembroke Railway at Harrowsmith be no longer responsible that trains and engines on the Bay of Quinte are not allowed to pass the crossing in said order named unless the distant signals on the Kingston and Pembroke Railway are first set at danger, and that the trains and engines of the Kingston and Pembroke are not allowed to pass the said crossing unless the distant signals of the Bay of Quinté Railway are first set at danger, and that such responsibility be placed upon and borne by the Bay of Quinté Railway. (Application 70. Case 2895.)

Stands for further consideration.

864. Application of Edward Scott Brennen, of the city of Hamilton, Ontario, in the county of Wentworth, for an order, under section 26 of the Railway Act, for a writ of sequestration to be issued to sequester the goods, chattels and personal estate and the rents, issues and profits of the real estate of the Grand Trunk Railway Company.

Also for an order that the said company pay him $6,731.96, being the amount shown in statement of damages delivered by the applicant to the Grand Trunk Railway on the 15th day of February, 1907, and for such further or other order or relief as the circumstances may require and the Board deems best. (Application 2001.)

Application dismissed.

865. Application of the Grand Trunk Railway Company of Canada, under sections 176 and 227 of the Railway Act, authorizing it to connect the branch line of railway which it was authorized to construct by order of the Board, dated July 25, 1906, extending from a point on its railway south of the concession road between the 6th and 7th concession of the township of Crowland, in the county of Welland, Ontario, thence northwesterly and along, upon and across the said concession road to the premises of the Ontario Iron and Steel Company, Limited, situate on lot 25 in the said concession of the said town, with the branch line of railway to the said premises of the Ontario Iron and Steel Company which the Michigan Central Railroad were authorized to construct by order of the Board, dated 27th October, 1906. (Application 2497. Case 3117.)

Application granted. Order issued.

866. The application of the Grand Trunk Railway Company of Canada, under sections 256 and 257 of the Railway Act, directing the Canadian Pacific Railway Company to reconstruct and maintain in a good and proper condition of repair the subway carrying the line of the Brockville and Ottawa Railway (now owned and operated by the Canadian Pacific Railway Company) under the main line of the applicant company's railway at mile post 124·96, a short distance east of the applicant company's station in the city of Brockville, Ontario, so that the same shall be safe for the passage thereover of the traffic on the applicant company's railway, and also directing the Canadian Pacific Railway Company to repay to the applicant company the amounts heretofore expended by it in making repairs in the said subway. (Application 6972. Case 3015.)

Order made authorizing applicant company to reconstruct at the subway, at the expense of the Canadian Pacific Railway.

867. Application of the municipal corporation of the township of Saltfleet, in the county of Wentworth, Ontario, for an order under section 187 of the Railway Act of 1903, directing the Toronto, Hamilton and Buffalo Railway Company to build and maintain a subway for vehicles under their railway near its intersection with the Lee Mountain road in the said township. (Application 6892. Case 2943).

Application refused. Leave granted township to make fresh application. Subsequently order made directing certain changes and alterations at the crossing at the expense of company.

868. Application of the Grand Trunk Railway Company of Canada, under section 227 of the Railway Act, for leave to cross with its second track the track of

the United Counties Railway (operated by the Quebec, Montreal and Southern Railway) at St. Hyacinthe Junction, P.Q. (Application 6954. Case 2991.)

Application granted. Order issued. Expense to be borne by the Montreal and Southern Railway.

869. Application of the Canada Atlantic Railway Company, as lessees of the Central Counties Railway Company, for leave to construct, maintain and operate a branch line of railway and six spurs, extending from a point on its railway in the town of Hawkesbury to the premises of the Riordon Paper Mills Company, North Main street, in the said town, as shown on plan and profile filed. (Application 6253. Case 2646.)

NOTE.—In conjunction with this application will also be heard the application of the Canadian Northern Ontario Railway Company to construct a branch line to the Riordon Paper Mills, and the application of the Canadian Northern Railway Company to connect its spur with the Grand Trunk tracks at the Riordon paper mills.

Application granted. Order issued.

870. Application of the Canadian Pacific Railway Company, under sections 222 and 227 of the Railway Act, for an order granting the authority of the Board to construct, maintain and operate a branch line of railway, or spur, from a point on its most southerly track northwest of its stock yards on the Richmond road, in the city of Ottawa, situated about 340 feet northeasterly from the northwestern side of said Richmond road, and thence northeasterly and easterly through its station yard, across the property of Mr. William J. Campbell, and across the track of the Grand Trunk Railway on northwest side of said Richmond road, to and into the property of William J. Campbell, to a connection with a spur of said Grand Trunk Railway on the property of said William J. Campbell, for a total length of 570 feet. (Application 5504. Case 2147.)

Application granted. Order issued.

871. Application of the Canada Atlantic Railway Company, under sections 222 and 227 of the Railway Act, for authority to construct, maintain and operate a branch line of railway or siding extending from a point on the applicant company's line of railway on the Richmond road in the city of Ottawa, province of Ontario, thence northeasterly across parts of lots 38 and 39, concession A, township of Nepean, now in the city of Ottawa, to the premises of W. J. Campbell. (Application 5662. Cace 2291.)

Application granted. Order issued.

872. Application of the city of Ottawa and the corporation of the county of Carleton, under sections 237 and 238 of the Railway Act, for an order directing the Canada Atlantic Railway Company, the St. Lawrence and Ottawa Railway Company, the Canadian Pacific Railway Company and the Montreal and Ottawa Railway Company to submit to the Board a plan and profile of such portions of their respective railways as are constructed across the Richmond road, a public highway, in the city of Ottawa, and directing the construction by the said railway companies, or by some or one of them, of such works as may be necessary to carry the said highway over their said railways and such change in the location of the portions of their said railways which cross the said highway as may facilitate the construction of the said 5662. Case 2291.)

Application granted. Order issued. Work to be completed by July 1, 1909. Costs to be apportioned as follows: —

4/36 by county of Carleton.
9/36 by city.
4/39 by county of Carleton.

873. Application of the Grand Trunk Railway Company of Canada, under the Railway Act, for an order settling the terms of the lease which the applicant com-

pany was directed to make to the Canadian Pacific Railway Company under paragraph 6 of the order of the Board, dated the 11th July, 1905, made upon the application of the Guelph and Goderich Railway Company for leave to take possession of, use and occupy certain lands and premises belonging to the applicant company, in the city of Guelph, province of Ontario. (Application 1308. Case 2303.)

Settled by parties.

874. Application of the Canadian Pacific Railway Company under section 227 of the Railway Act for an order authorizing the crossing of the tracks of the Grand Trunk Pacific Railway by its Pheasant Hills branch, by means of an overhead bridge at mileage 457·1 of the said Pheasant Hills branch, section 27, township 40, range 23 west of the 3rd meridian. (Application 5538. Case 2183.)

Application granted. Order issued.

875. Application of the corporation of the city of Ottawa for an order under section 30 of the Railway Act, directing the Canadian Pacific Railway Company, the Grand Trunk Railway Company and the New York Central Railway Company to so construct all locomotive steam engines used by the said companies on their railways within the city of Ottawa as to consume their own smoke or as to prevent the emission therefrom of dense or opaque smoke, or to use upon the said engines such appliances as will prevent the emission therefrom of dense or opaque smoke, or to use in connection with such locomotive steam engines smokeless coal or coal which will not produce dense or opaque smoke. (Application 6595. Case 3023.)

General order issued covering this and similar applications. Order to take effect January 1, 1909.

876. Applicataion of the muncipality of Delta for an order allowing costs incurred by the municipality in connection with the application of the Vancouver, Victoria and Eastern Railway and Navigation Company, for leave to carry its railway along river road, on the south bank of the Fraser river, municipality of Delta, British Columbia. (Application 4307. Case 967.)

Applications granted. Costs to be fixed by secretary of previous application.

877. Application of the Grand Trunk Railway Company of Canada for an order under section 29 of the Railway Act, varying or amending paragraph 5 of the order of the Board, dated the 5th April, 1904, made upon the application of the Niagara, St. Catharines and Toronto Railway Company for an order to rescind or vary an order of the Railway Committee of the Privy Council, bearing date the 27th day of April, 1898, approving of the place and mode of crossing by the branch line from the Grand Trunk Railway Company's main line at the village of Merritton, to the paper and cotton mills in that village, of the main line of the Niagara, St. Catharines and Toronto Railway, by requiring the Niagara, St. Catharines and Toronto Railway Company to place and maintain a watchman at the said crossing between the hours of 8 a.m. and 6 p.m. of each day, not including Sundays, instead of between the hours of 8 a.m. and 8 p.m. of each day, not including Sundays, as in said clause mentioned, and that the wages of the watchman employed at said crossing shall not exceed twelve and a half (12½) cents per hour. (Application 397. Case 1251.)

Application dismissed.

878. Application of the Grand Trunk Railway Company of Canada, under sections 222 and 227 of the Railway Act for authority to construct, maintain and operate a branch line of railway and spurs therefrom extending from a point on the applicant company's railway in the city of Hamilton, east of the point where the Toronto, Hamilton and Buffalo Railway's (belt line) industrial spur passes under the tracks of the applicant company, from Hamilton to Niagara Falls, thence westerly, crossing by means of an overhead bridge the tracks of the Toronto, Hamilton and Buffalo Railway's (belt line) industrial spur to the premises of the Berlin Machine Works, Limited. (Application 6664. Case 2818.)

Settled by agreement between the parties.

(Subsequently)—Application granted. Order issued.

879. Application of the Canadian Northern Ontario Railway Company, under section 317 of the Railway Act, for an order directing the Grand Trunk Railway Company and the Canadian Pacific Railway Company to provide facilities for passengers desiring to travel from or through points on the lines of the respondent companies, or either of them, to points on the line of the applicant company and its connections, and to issue tickets at through rates accordingly. (Application 6812.)

Order made that application company and respondent company publish and file tariffs of joint passenger tolls to apply on passenger and traffic interchange between the said companies other than that having its origin at the respondent company's points or with companies that connect and deliver to respondent company and destined to points common to applicant company's and respondent company's lines. The other requests contained in the application refused.

880. Complaint of the Fredericton board of trade respecting freight tariffs in force by railways in Canada on goods coming to Fredericton, New Brunswick, from points west of Montreal, Quebec, as against freight rates from the same points in the west to St. John, New Brunswick, and St. Stephen, New Brunswick. (Application 1600.)

Order issued directing Grand Trunk Railway to restore to Fredericton the St. John basis of rates on traffic originating west of Montreal.

881. Aplication of the Railway Trainmen of Ontario to consider and settle the proposed uniform code of train rules. (Application 1750.)

Note.—The Board will also consider at the above sittings the following matters submitted by the joint committee of the legislative board of the Brotherhood of Railroad Trainmen as follows:

1. That company employees be allowed to attend investigations held by the Board's inspectors of accidents, on request of witness.

2. That witness fees to be paid at such investigations be increased.

3. That the Board order an increase in the number of men on trains for flagging purposes.

4. That telegraph operators be not employed under the age of twenty-one and evidence be furnished of their having one year's experience in railroad work.

5. That the Board's inspectors be required to ride on and inspect the conditions of locomotives.

6. That all engines be equipped with dump ash pans such as will avoid the necessity of a man going under the engine to clean the same.

The Board will also consider the following matters presented to it by memorial through the Ontario Brotherhood of Railroad Trainmen:—

1. That all brakes, dogs and ratchets be placed on the top of the car instead of on the step at the end of the car.

2. That all cars used as caboose be equipped with air-brakes, gauge, conductor's valve, platform, steps and cupola.

3. That operating levers be placed on both sides of the draw-bar along the end of the car

4. That no obstructions be piled on the tops of any box cars while being hauled by the train crew.

5. That any order requiring men to ride on the top of trains be abolished.

6. That safety hand-holds and steps be placed on engines.

7. That obstructions and structures be placed not less than six feet clear of rail.

8. That not less than five men be placed on any train, and not less than three men on light engines.

9. That there be a car limit as to number.

10. That passenger brakemen have one year's experience in yard or freight service.

11. That steps be taken to prevent the handling of crippled cars on trains, except on wreck trains.

Order issued, for terms of which see first portion of annual report, page 48.

882. Application of the Saraguay Electric Light and Power Company, under section 246 of the Railway Act, for leave to carry power transmission lines across the tracks of the Grand Trunk Railway at Coté St. Paul road, Turcot village, Quebec. (Application 6351. Case 2684.)

Application granted and order issued.

883. Application of the corporation of the city of Peterborough, under sections 237 and 238 of the Railway Act, directing the Canadian Pacific Railway Company to provide for the protection and maintenance of the highway at the level crossings of the said railway with Aylmer street in the city of Peterborough. (Application 6580. Case 2786).

NOTE.—The question for consideration in connection with the above application is the apportionment of the cost of the protection of the said crossing referred to in the letter of the city solicitor, Peterborough, dated 10th April, 1908, and the letter of C. Drinkwater, assistant to the president Canadian Pacific Railway, in connection with the report of the Board's chief engineer, dated 24th March, 1908.

Application granted. Cost of watchmen to be borne as follows:

¾ by the railway company.

¼ by the city.

884. Application of the corporation of the City of Peterborough, under sections 237 and 238 of the Railway Act, for an order directing the Grand Trunk Railway Company of Canada, to provide protection at the level highway crossing of the said railway at Reid street in the city of Peterborough. (Application 6581. Case 2785.)

NOTE.—The question for consideration in connection with the above application is the apportionment of the cost of the protection of the said crossing, as referred to in the letter of the city solicitor, Peterborough, dated April 4, 1908, and the letter of M. K. Cowan, K.C., dated April 21, 1908, in conjunction with the report of the board's engineer, dated March 24, 1908.

Application granted. Order issued. Cost to be divided as follows:—

Two-thirds of cost of providing shelter and accommodation for watchmen and wages to be borne by the Grand Trunk Railway.

One-third by applicant.

885. Application of the Grand Trunk Railway Company of Canada, under sections 222 and 237 of the Railway Act, for authority to construct, maintain and operate a branch line of railway or spur from a point on lot No. 157, parish of St. Blaise, Quebec, thence in a westerly direction across lot No. 158, in the said parish, the Grand Bernier road, and lot 157, to the premises of the People's Specialty Co., Grand Ligne. (Application 5910. Case 2485.)

Application granted. Order issued. Trains of applicant company to stop at crossing.

886. Application of the Southwestern Traction Company of London, Ontario, under section 246 of the Railway Act, for leave to erect, place and maintain transmission wires across the track of the Grand Trunk Railway Company at a point approximately one mile north of St. Thomas, at the road known as the Lynhurst road. (Application 5244. Case 1861.)

Application granted. Order issued.

887. Application of the Canadian Pacific Railway for an order amending order of the Board No. 3238, dated July 3, 1907, requiring railway companies in Canada subject to the Board's jurisdiction, to equip passenger coaches with two fire extinguishers. (Application 4739. Case 1858.)

Order issued amending previous order and providing for one fire extinguisher in each car.

888. Application of the Grand Trunk Pacific Railway, under section 159 of the Railway Act, for the approval of the location of its line through the city of Fort William. (Application 1519. Case. .)

Stands pending approval of Bill 25, an Act respecting the joint section of the Canadian Pacific Railway Company and Grand Trunk Pacific Railway Company at Fort William, Ontario, by Parliament of Canada.

889. Application of the Canadian Northern Railway Company, under section 45 of the Railway Act, for order amending order of the Board No. 558, dated July 18, 1905, approving and sanctioning the location of the Canadian Pacific Railway (Wolseley-Reston branch) so far as it affects the land covered by the Hartney-Regina branch of the applicant company. (Application 1539. Case 2458.)

Application dismissed.

890. Application of the Grand Trunk Pacific Railway Company, under section 227 of the Railway Act, for leave to cross the track of the Canadian Pacific Railway Company (Pheasant Hills branch), section 27, township 29, range 22, west of the 2nd meridian, Saskatchewan. (Application 5485. Case 2108.)

Order made declaring Canadian Pacific Railway senior company, and directing applicant company to bear all expenses.

891. Application of the stone quarry operators for an order, under section 323 of the Railway Act, disallowing the proposed increase in freight rates for the carriage of stone upon the railways of the Canadian Pacific Railway and the Grand Trunk Railway Company. (Application 4456. Case 2965.)

Application dismissed. Order, however, contained provision that stone rates of the said railway companies from the towns of Galt, Guelph, Niagara Falls, Longford, St. Marys and Ivanhoe to Toronto and common points do not exceed rates from other quarry points of similar or greater distances, and that the present rates in force be amended accordingly.

892. Application of the Morang Educational Company, Limited, of Toronto, Ontario, under section 327 of the Railway Act, for an order fixing a proper freight classification throughout Canada for public school books. (Application 7338. Case 3203.)

Order made amending car classification No. 13, by the addition of C. L. rating of third class on books in boxes or cases. Order effective May 20, 1908.

893. Application of the Winnipeg Jobbers' and Shippers Association, under the Railway Act, for an order directing that railway companies (a) where the traffic warrants it to erect a freight shed and appoint a permanent agent in charge of the business at such station; (b) not to reduce any regular station with an agent in charge to a flag station without an agent; (c) not to close any regular or flag station without the approval of the Board of Railway Commissioners. (Application 4205. Case 871.)

Partially dealt with by judgment of the Chief Commissioner, dated the 2nd November, 1908. The companies required to appoint and maintain permanent agents at stations where the total freight and passenger earnings amount to $15,000 per year, and at points where the business consists of shipping grain where such shipments amount to at least 50,000 bushels per year, and at points of shipment where telegraph operators are located for handling of trains, such operators should be provided with the necessary equipment to take care of traffic.

894. Application of the Canadian Northern Quebec Railway Company for an order, under sections 222 and 237 of the Railway Act, for authority to (a) construct a spur line to the Lakefield Portland Cement Company on lot 74, parish of Pointe aux Trembles, county of Hochelaga; (b) and cross with the said spur the intervening tracks of the Montreal Terminal Railway Company. (Application 7109. Case 3079.)

Application granted. Order issued.

895. Application of the Canadian Pacific Railway Company, under section 194 of the Railway Act, 1903, for an order that the Peoples' Telephone Company be required to substitute wires for the existing iron wires that cross the right of way of

the railway company on College street in the village of Lennoxville, Quebec. (Application 4052. Case 722.)

Order made directing telephone company to standardize crossing.

896. Application of the town of Notre Dame de Grace, under section 250 of the Railway Act, to construct a sewer under the tracks of the Grand Trunk Railway Company, near the village of Turcot, Quebec. (Application 6891. Case 2964.)

Application granted. Order issued. Work to be done under supervision of Grand Trunk Railway engineer. Expenses of engineer to be paid by applicants.

897. Application of the Canadian Pacific Railway Company, under section 256 of the Railway Act, for approval of the plans of the proposed abutments and piers under existing bridge at mileage 19·86, Farnham section crossing, Richelieu street, St. Johns, province of Quebec. (Application 5133. Case 2893.)

Application granted. Order issued.

898. Application of the Peoples' Telephone Company for an order, under section 245 of the Railway Act, directing the Canadian Pacific Railway Company to permit the applicants to make telephonic connection and communication with the ticket office in the station and with the freight office of the said company in the city of Sherbrooke. (Application 6639. Case 2897.)

Judgment reserved.

Subsequently general form of order for this and like applications settled upon and order in this case granted.

899. Complaint of Dr. Charette, mayor of Notre Dame des Neiges, of the failure on the part of the Montreal Park and Island Railway Company to file and receive approval by the Board of its standard passenger tariffs, and that the Montreal Park and Island Railway Company charges passenger fares of 5 cents each from points in the city of Montreal to Dellingham avenue, and an additional 10 cents each from Dellingham avenue to Coté des Neiges, while it previously sold tickets at the rate of 6 for 25 cents for transportation to Notre Dame des Neiges. (Application 6320.)

Order made dismissing the complaint.

900. Application of the Napierville Junction Railway Company, under section 277 of the Railway Act, for leave to join its tracks with the tracks of the Canadian Pacific Railway Company, and to cross the tracks of the Canadian Pacific Railway Company at a point one mile east of St. Constant station, on the line of the Canadian Pacific Railway. (Application 5076. Case 2364.)

Settled in the terms of agreement between the parties filed with Board.

901. Application of the Grand Trunk Railway Company of Canada, under section 227 of the Railway Act, for authority to cross with two tracks leading from its main line at Turcot to its new freight yards and terminals at Turcot, the tracks of the Montreal Park and Island Railway Company at two different points, namely, near the eastern and western extremities of said freight yards. (Application 6023. Case 2564.)

Application removed from list. Leave granted to either party to reinstate on ten days' notice.

902. Application of the corporation of the village of Papineauville, in the county of Labelle, in the province of Quebec, for an order granting leave to the applicants to construct a street crossing on the tracks of the Canadian Pacific Railway between Papineau avenue No. 122 of the Cadastre of the parish of Ste. Angelique and the lots Nos. 103, 98 and 99 of the said cadastre, and ordering that the railway company supply and construct the said crossing. (Application 5545. Case 2507.)

Application granted. Cost of maintaining crossing between tracks to be borne by railway company.

903. Complaint of Joseph Legault with regard to cement culverts of the Grand Trunk and Pacific Railway Companies on lots 50 and 51 cadastral, parish of Pointe Claire, near Lakeside station, Quebec. (Application 6063.)

Complaint withdrawn.

904. Application of the Canadian Pacific Railway Company, under sections 221, 222, 227 and 237 of the Railway Act for leave to construct branch lines in the city of Montreal, Quebec—

1. To the premises of Shearer, Brown & Wallace, crossing St. Patrick and Island streets; and

2. To the premises of the Sherman-Williams Paint Company, crossing St. Patrick street and connecting with spur of the Grand Trunk Railway Company. (Application 5508. Case 2154.)

Application granted. Order issued subject to the conditions set forth in the order.

905. Complaint of the Truro Condensed Milk Company, Limited, against the Grand Trunk Railway Company of Canada, with respect to rates and service on milk shipments. (Application 4838.)

Complaint dismissed.

906. *In re* protection of the crossing of the tracks of the Grand Trunk Railway Company of Canada by the tracks of the Canadian Pacific Railway Company in the village of Lennoxville, Quebec. (Application 419.)

Order made directing Grand Trunk Railway to install interlocking plant May 15, 1908. Cost to be borne by Grand Trunk Railway.

907. Application of the Canadian Northern Ontario Railway Company, under section 237 of the Railway Act, for authority to place a second track across Winchester street, at rail level, Toronto, Ontario. (Application 5346. Case 1979.)

NOTE.—This application is set down for the purpose of settling the terms and conditions on which order shall issue herein.

Application granted. Order issued. Crossing to be protected by gates and watchman at the expense of the applicant company, with leave to the city to apply to protect the crossing by means of a bridge.

908.—*In re* complaint of the municipal council of the town of Bowmanville, Ontario, regarding unprotected state of the railway crossing directly east of the Grand Trunk Railway Company's station on the leading road from the town to the lake, commonly known as the wharf road. (Application 7292.)

Application refused.

909. Application of the Canadian Pacific Railway Company, as lessee exercising the franchises of the Toronto, Grey and Bruce Railway Company, under section 237 of the Railway Act for an order authorizing it to cross, with its grade revision, already approved, the road allowance between lots 10 and 11, concession 8, township of Vaughan, county of York, Ontario, at mile 12·55 of the said revision. (Application 6373. Case 2698.)

NOTE.—This application is set down for the purpose of settling the terms and conditions on which order shall be issued herein.

Order made granting application to cross by means of a subway. Expense of excavation to be borne by the township of Vaughan.

910. Application of the Grand Trunk Railway Company of Canada, under section 227 of the Railway Act, for leave to cross with its additional track on Ferguson avenue, Hamilton, Ontario, which the applicant company was authorized to construct by order of the Board, No. 3977, dated October 30, 1907, the two tracks of the Hamilton Street Railway Company on Barton street, where it is intersected by Ferguson avenue, Hamilton, Ontario. (Application 5824. Case 2426.)

NOTE.—This application was set down for the purpose of settling the terms and conditions on which order should issue herein.

Order made settling terms and conditions of crossing. Crossing to be protected by one-half interlocker.

Cost of installation to be borne by Hamilton street railway.

911. Application of the municipal council of Weston *in re* Grand Trunk Railway bridge crossing the Weston road at the north end of the town. (Application 4393. Case 1046.)

Application dismissed.

912. Application of the Grand Trunk Railway Company of Canada, under section 29 of the Railway Act, for an order amending the order of the board, dated July 14, 1904, made upon the application of the Preston and Berlin Street Railway Company, Limited, authorizing that company to cross with its track the spur line of the Grand Trunk, running from the main line in the town of Waterloo and crossing Wilmot street and the switches leading from the said spur line of the Grand Trunk by Charles and Joseph streets, in the town of Berlin, by directing the said Preston and Berlin Street Railway Company, Limited, at its crossing of the Grand Trunk's Charles street spur to install derails in the Preston and Berlin Street Railway main tracks and spurs therefrom. (Application 718. Case 2505.)

Application dismissed.

913. Application of William J. Miller and Benjamin F. Miller, under section 198 of the Railway Act, 1903, for an order directing the Michigan Central Railroad Company (or the Canada Southern Railway) to provide and construct a suitable farm crossing where the said railway intersects lot 10, in the 4th concession, township of Bertie, county of Welland, Ontario. (Application 6403. Case 2724.)

Application dismissed.

914. Application of the Walkerton and Lucknow Railway Company, under section 227 of the Railway Act, for an order granting authority to construct, maintain and operate certain railway crossings and junction in the town of Hanover, Ontario, in connection with said spurs in said town marked L-1, L-2, and the spur to the furniture factory, as shown on plan filed with the Board, the first of said crossings being a crossing of the narrow gauge track of the Hanover Portland Cement Company by the spur marked A-1; and the second of said crossings being a crossing of a track operated by the Grand Trunk Railway Company on land belonging to said Hanover Portland Cement Company, and being at chainage 1455-07 of said spur L-2, the said junction being a junction with a track operated by the Grand Trunk Railway Company, as a spur to the furniture factory at a point opposite the property belonging to J. Campbell on John street, opposite lot 87 on the eastern side of said John street, said point of junction being at chainage 1458-58·3 of said spur to the furniture factory. (Application 6819. Case 2905.)

Application granted.

915. Application of the Walkerton and Lucknow Railway Company, under section 222 of the Railway Act, for an order authorizing the construction, maintenance and operation of branch lines in the town of Hanover, Ontario, from a point on its main line, being a point on lot 6, to a point in lot 3, to the premises of the furniture company, and also, firstly, from a point in lot 4, to a point in lot 2, and, secondly, from a point in lot 3 to a point in lot 2, being for the purpose of reaching the premises of the cement company and making connection with the tracks of the Grand Trunk Railway at this point, the whole being in the town of Hanover, concession 1, N. township of Bentinck, county of Grey, Ontario. (Application 6400. Case 2420.)

Application granted.

916. Application of the Grand Trunk Railway Company of Canada, under sections 222 and 237 of the Railway Act, for an order authorizing it to construct, maintain and operate five branch lines or sidings which have been constructed at the town of Hanover, Ontario—two for the Hanover Portland Cement Company, Limited, and the remainder for the Knechtel Furniture Company, Limited. (Application 6743. Case 2854.)

Application granted.

917. Application of the Walkerton and Lucknow Railway Company, under section 178 of the Railway Act, for authority to take additional lands adjoining their

railway in the village of Priceville and township of Artemisia, Ontario, for the convenient accommodation of the public and of the traffic on its railway, and to secure the efficient construction, maintenance and operation of the railway. (Application 6818. Case 2904.)

Application granted. Order issued.

918. Application of the Grand Trunk Railway Company of Canada, for an order under the Railway Act authorizing it to cross with its second track from North Parkdale station to Toronto Junction, which it was authorized to construct by order of the Board No. 3163, dated May 22, 1907—

1. The track of the Owen Sound section of the Canadian Pacific Railway Company.

2. The tracks of the Ontario and Quebec Railway, now leased and operated by the Canadian Pacific Railway Company, at a point east of Weston road, in the town of Toronto Junction, Ontario.

3. To move easterly from its present position the track of the Owen Sound section of the Canadian Pacific Railway, where the same crosses Weston road in the town of Toronto Junction, Ontario. (Application 6071. Case 2584.)

Order made granting the application in terms set forth in order.

919. Application of the corporation of the town of Waterloo, Ontario, for an order, under sections 30 and 32, repealing, rescinding, or varying on order made by the Railway Committee of the Privy Council, dated September 27, 1894, and directing the Grand Trunk Railway Company to furnish further protection by means of gates or otherwise at the crossing at King street, Waterloo, Ontario. (Application 5728. Case 2338.)

Order issued directing protection by gates. Cost of installation, maintenance and operation to be divided among the three corporations interested.

920. Application of the Canadian Pacific Railway Company, under section 186 of the Railway Act, 1903, for leave to cross with its Sudbury-Kleinburg branch, certain highways in the township of Vespra, county of Simcoe, Ontario. (Application 3911. Case 605.)

921. Application of the city of Hamilton, under sections 30 and 269 of the Railway Act, for an order prohibiting the Grand Trunk, the Toronto, Hamilton and Buffalo, and the Canadian Pacific Railaway Companies from using soft coal on locomotives used by them for shunting purposes, within the limits of the city of Hamilton, and directing that anthracite coal only be used on such locomotives. (Application 5807. Case 2408.)

Covered by general order.

922. Application of the corporation of the city of Hamilton for an order, under the Railway Act, directing the Toronto, Hamilton and Buffalo Railway Company and the Canadian Pacific Railway Company to provide and construct a suitable highway bridge over the tracks of the company at the intersection of the line of the company at Garth street, in the city of Hamilton, Ontario. (Application 1592. Case 2739.)

Order made directing Toronto, Hamilton and Buffalo Railway Company to provide a highway bridge.

923. Application of the Niagara, St. Catharines and Toronto Railway Company, under the Railway Act, for an order authorizing the company to close up or divert the street or road in the town of Thorold known as Welland avenue, in the manner and as shown on the plan showing the proposed closing up or deviation. (Application 6811. Case 2901.)

Application refused.

924. Application of the Grand Trunk Railway Company of Canada, under subsection (x) of section 3 of the Lord's Day Act, 6 Ed. VII, cap. 27, permitting the said company by its servants, workmen, and agents, in order to prevent undue delay to traffic, to do any Sunday, work incidental to the continuance to its destination of

freight in transit at the beginning of such Sunday, notwithstading that the cars containing such freight and forming part of any train so in trasit, may not have a common destination, but may require to be switched, shunted or otherwise dealt with at railway yards, divisional, or other points, for the purpose of being sent on to their several destinations.

And for an order also permitting the said company to do such work upon any Sunday as may be necessary for the purpose of furnishing to persons engaged in any manufacturing or other industry, or to shippers of live stock, a continuous railway service without which such persons would be unduly hampered and delayed in their said business.

And for such further and other order as to the Board may seem meet upon the evidence to be adduced before them. (Application 5689. Case 2460.)

Order made granting leave to Grand Trunk Railway to unload grain at lake ports between September 15 and June 1 of the year following upon the Lord's Day, and to do work for such purpose necessary to furnish a continuous service; also that all other companies carrying grain from Ontario lake ports be granted the same privilege.

925. Application of the corporation of the city of Toronto, under sections 237 and 238 of the Railway Act, for an order directing the Grand Trunk Railway Company to provide and maintain gates and a watchman at the crossing at Bloor street west by the tracks of the Northern Division of the Grand Trunk Railway Company of Canada. (Application 6791. Case 2891.)

Order made directing Grand Trunk Railway to establish gates within six months. Applicants to pay half the cost of installation and maintenance.

926. Application of the city of Toronto, under sections 237 and 238 of the Railway Act, and under section 5 of the Esplanade Tripartite Agreement, dated July 26, 1892, for an order directing the Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company to properly plank between the tracks of the respective companies at the crossing of Church street, Toronto, and also to protect the said crossing by gates and watchmen. (Application 6955. Case 2993.)

Order made requiring railway companies to keep a flagman at crossing from April 15, to November 15 each year between 7 a.m. and 7 p.m. Cost to be borne by railway companies.

927. Application of the Toronto Suburban Railway Company, for an order amending order of the Railway Committee of the Privy Council dated November 22, 1892, and May 10, 1893, by fixing the responsibility for the protection of the said crossing of the Toronto Suburban Railway Company over the line of the Grand Trunk Railway Company and the Canadian Pacific Railway Company upon the said companies, and reducing the amount to be paid by the Toronto Suburban Railway Company towards the construction, maintenance, and protection of the said crossings as fixed by the said orders of the Railway Committee. (Application 132. Case 1353.)

Order made directing amendment of original order and apportioning cost as follows:—

¼ by applicant company.
¼ by city.
¼ by Grand Trunk Railway.
¼ by Canadian Pacific Railway.

928. Complaint of the city of Toronto, Ontario, in *re* protection at crossing of Queen street east, Don, Toronto, Ontario. (Application 43).

Complaint dismissed.

929. Complaint of H. L. Drayton, K.C., in *re the* level crossings of the Grand Trunk Railway Company at Windermere and Ellis avenues, in the township of York, Ontario. (Application 6994. Case 3026.)

Reserved until Toronto viaduct question is settled.

930. Application of the Ingersoll Telephone Company for an order, under section 245 of the Railway Act, permitting the applicant company to install a telephone

in the station of the Canadian Pacific Railway Company at Ingersoll, Ontario. (Application 6910. Case 2961.)

Application granted.

931. Application of the Canadian Pacific Railway Company, under section 221 of the Railway Act, for authority to construct, maintain and operate a branch line or spur from a point on its main line in the city of Toronto, about eighty feet northeasterly from the eastern side of Beachall street, and thence southwesterly across said Beachall street and across property belonging to the Ontario and Quebec Railway Company to Front street, and thence easterly along the southern side of Front street for a total distance of about 5,200 feet to the eastern side of Jarvis street, in the said city. (Application 4369. Case 1026.)

Application dismissed.

932. Application of the Toronto Suburban Railway Company, under the Railway Act, for an order restraining the Toronto and Niagara Power Company from maintaining and operating its power transmission lines and telephone lines over the tracks of the Toronto Suburban Railway Company at Weston road, immediately north of St. Clair avenue, in the town of Toronto Junction. (Application 3793. Case 506.)

Application granted. Order issued.

933. Application of the Toronto Suburban Railway Company, under the Railway Act, for an order restraining the Toronto and Niagara Power Company from maintaining and operating its power transmission lines and telephone lines over the tracks of the Toronto Suburban Railway Company at Davenport road, in the town of Toronto Junction, near the crossing the northern division of the Grand Trunk Railway Company. (Application 3794. Case 507.)

Application granted. Order issued.

934. Application of the Toronto Suburban Railway Company, under the Railway Act, for an order restraining the Toronto and Niagara Power Company from maintaining and operating its power transmission lines and telephone lines over the tracks of the Toronto Suburban Railway Company at Bathurst street, in the township of York, immediately north of the Canadian Pacific Railway Company's tracks. (Application 3795. Case 508.)

Application granted. Order issued.

935. Application of the Grand Trunk Railway Company of Canada, under section 175 of the Railway Act, 1903, for authority to construct a branch line or siding, and two spurs therefrom, from a point on its line of railway at or about the foot of Fraser avenue; thence extending northerly along Mowat avenue, Toronto, to the establishment of the Toronto Carpet Company and the Malta Vita Food Company, as well as the property of the city of Toronto on the westerly side of Mowat avenue. (Application 3764. Case 489.)

Application granted. Order issued.

936. Application of Jane Prittie to vary or rescind order of the Board No. 2336, dated the 12th of December, 1906, authorizing the construction and operation of a branch line in the town of Toronto Junction to the premises of the Union Stock Yards, Limited. (Adjourned hearing.) (Application 2112. Case 2500.)

Aplication dismissed.

937. Complaint of J. W. Borsbery, under the Railway Act, in *re* construction of a branch line by the Oshawa Railway Company on May street and crossing King street, in the town of Oshawa, Ontario.

Complaint withdrawn.

938. Application of the Grand Trunk Railway Company of Canada, under section No. 277 of the Railway Act, for leave to cross with its spur the track leading off the twentieth district of the applicant company's railway, the spur track of the

Canada Southern Railway in the applicant company's south yard at Fort Erie, Ontario. (Application 6883. Case 2913.)

Application granted. Order issued.

939. Application of the city of Toronto, under the Railway Act, for an order directing the Grand Trunk Railway Company of Canada, in accordance with the provisions of an agreement made between the applicants and the Grand Trunk, dated October 12, 1903, to protect, by means of gates and semaphores and derails in the tracks of the Toronto Railway Company, the crossing of Front street, in the city of Toronto by the Grand Trunk's branch line or siding to its John street freight yards, authorized to be constructed by order of the Railway Committee of the Privy Council, dated October 17, 1903. (Application 231. Case 3254.)

Order made directing protection of crossing by gates, semaphores and derails at expense of the Grand Trunk Railway Company.

940. Application of the Canadian Pacific Railway Company, under the Railway Act, for a proposed connection between the Canadian Pacific and Grand Trunk Railway Companies at Galt, Ontario. (Application 1380. Case 1731.)

Order made directing Canadian Pacific Railway Company to make connection at Galt before January 1, 1909. Cost to be borne by Canadian Pacific Railway Company.

941. Consideration of memorandum of judgment of the Board, dated December 26, 1907, *in re* interswitching, in conjunction with report of Chief Traffic Officer, dated December 18, 1907. (Application 6713. Case 2846.)

This application dealt with by general interswitching order.

942. Application of the boards of trade of Berlin, Galt, Preston, Hespeler and Waterloo, Ontario, under section 228 of the Railway Act, for an order directing the Canadian Pacific Railway Company, the Grand Trunk Railway Company, the Galt, Preston and Hespeler Street Railway Company and the Preston and Berlin Street Railway Company to connect their lines of tracks in the towns of Berlin, Galt, Preston, Hespeler and Waterloo, as to admit of the safe and convenient transfer or passing of engines, cars and trains from the tracks or lines of one of the above railways to those of the others, and that such connections shall be maintained and used by the said Canadian Pacific Railway Company, the Grand Trunk Railway Company, the Galt, Preston and Hespeler Street Railway Company and the Preston and Berlin Street Railway Companies, respectively.

Also to determine by what company or companies or other corporations or persons, and in what proportions the cost of making and maintaining any such connections shall be borne, and upon what terms traffic shall be thereby transferred from the lines of one railway to those of another or any other railway or railways that might hereafter enter the said towns of Galt, Preston, Hespeler, Berlin and Waterloo. (Application Nos. 1762, 1763, 1758 and 1761. Cases 2394, 2393, 2392 and 2391.)

Application dismissed.

943. Complaint of the Canadian Manufacturers' Association, the Huntsville Lumber Company and others, under section 252, 253 and 254 of the Railway Act, 1903, against the Grand Trunk Railway Company of Canada *in re* interswitching charges at Toronto, Ontario. (Application 4459. Case 1356.)

Disposed of under general interswitching order.

944. Complaint of the W. Booth Lumber Company, Limited, Toronto, Ontario, *in re* interswitching charges of the Grand Trunk Railway Company at Toronto. (Application 4459. Case 1182.)

Disposed of under general interswitching order.

945. Application of the Winnipeg manufacturers (Canadian Manufacturers' Association) for an order that the transportation charges made by the Canadian Pacific and Canadian Northern Railway Companies in their established tariffs applying to and from their respective terminals in the city of Winnipeg be extended to

cover the terminal switching expenses of the delivering or initial carriers, as the case may be, on non-competitive business in and out of the said city. (Application 4200. Case 865.)

Disposed of under general interswitching order.

946. Complaint of W. J. Lovering, lumber merchant, Toronto, *in re* interswitching charges of the Grand Trunk Railway Company at Toronto, Ontario. (Application 4459. Case 1126.)

Disposed of under general interswitching order.

947. Complaint of Messrs. Leak and Company, Toronto, Ontario, *re* interswitching charges of the Grand Trunk Railway Company at Toronto, Ontario. (Application 4459. Case 2230.)

Disposed of under general interswitching order.

948. Complaint of Messrs. T. Dexter and Son, of London, Ontario, *in re* switching charges of the Grand Trunk Railway Company on wheat to Canadian Pacific Railway at London from Point Edward to Goderich, Ontario. (Application 6799).

Disposed of under general interswitching order.

949. Complaint of the Boake Manufacturing Company, Limited, Toronto, in *re* interswitching charges of the Grand Trunk Railway Company at Toronto, Ontario. (Application 4459. Case 1217.)

Disposed of under general interswitching order.

950. Complaint of the Peterborough Sandstone Brick Company, Peterborough, Ontario, in *re* interswitching charges of the Canadian Pacific Railway Company and the Grand Trunk Railway Company at Peterborough, Ontario. (Application 5500. Case 2144).

Disposed of under general interswitching order.

951. Complaint of McColl Brothers and Company, oil merchants, Toronto, respecting release of responsibility demanded by the Canadian Pacific Railway Company on oil shipments to flag stations. (Application 6943.)

Application dismissed.

952. Complaint of the John Campbell Company, Limited, St. Thomas, Ontario, *re* interswitching charges of the Michigan Central Railroad Company at St. Thomas, Ontario. (Application 3991. Case 910.)

Order made fixing toll to be charged by railway company at $3 per carload, refund to be made by railroad company of excess charged between 19th July, 1907, and the date of order with interest at five per cent.

953. Complaint of J. Malkin and Sons *re* freight rates on tan bark to Berlin and London, Ontario, from points on the line of the Grand Trunk Railway Company. (Application 3882.)

Application dismissed.

954. Application of the town of Lindsay, hereinafter called the ' applicants,' under the Railway Act, 1903, for an order directing the Grand Trunk Railway Company of Canada, the Lindsay, Bobcaygeon and Pontypool Railway Company, and the Canadian Pacific Railway Company as lessees of the Lindsay, Bobcaygeon and Pontypool Railway Company, to make all necessary arrangements and afford to all persons and companies all reasonable and proper facilities for the receiving, forwarding and delivering of traffic upon and from their several railways, and for the interchange of traffic between the said railways in the town of Lindsay, and for forwarding rolling stock from one of the said railways to the other, in the said town, and for the return thereof. (Application 1397.)

Case struck off the list.

955. Application of the Windsor, Essex and Lake Shore Rapid Railway Company, under the Railway Act, for an order directing the Pere Marquette Railway to interchange traffic with the Windsor, Essex and Lake Shore Rapid Railway Company at Kingsville, Ontario. (Application 6817.)

Covered by general interswitching order.

956. Application of the Grand Trunk Railway Company of Canada, under section 29 of the Railway Act, for an order varying the order of the Board No. 358, dated February 23, 1905, authorizing the applicant company to take certain lands situate in the city of Toronto, for the purpose of a passenger station and passenger station yards therefor, and for such purposes as are necessary or usually connected therewith, by extending for the period of three years the times fixed in the said order for the commencement and completion of the station and appurtenances referred to in the said order. (File 588. Case 2828.)

Order made varying order No. 358 by extending time fixed by paragraph 4 for further period of 12 months from 22nd August, 1908.

957. Application of the Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company, in pursuance of paragraph 6 of order of the Board dated the 23rd February, 1905, for an order fixing the compensation to be paid by the Canadian Northern Railway Company (formerly the James Bay Railway Company), for the use of the Union station property at Toronto, including the service and accommodation provided, and at present and for some time past used and enjoyed by the Canadian Northern Ontario (formerly James Bay) Railway Company. (Application 588. Case 3208.)

Order made directing the Canadian Northern Ontario Railway to pay to Grand Trunk Railway amount fixed under agreement, 7th November, 1906, up to date of order. Companies to make arrangements between themselves for subsequent user and grounds.

958. Application of the city of Toronto, under the Railway Act, for an order compelling the Grand Trunk Railway Company of Canada to provide better protection at the level crossing known as the Sunnyside Crossing of the company's tracks at the western end of the city of Toronto, and for the lowering of the rate of speed of trains at the said crossing. (Application 4606. Case 1311.)

NOTE.—The Board will consider the question of the construction of a bridge at Sunnyside crossing and the appointment of the expenses thereof between the city and the railway companies interested.

Stands to be considered when Toronto viaduct application is disposed of.

959. Application of the corporation of the city of Toronto, under section 186 of the Railway Act, 1903, permitting the said corporation to construct a high level bridge crossing the Don improvement and the tracks of the Canadian Pacific and Grand Trunk Railway Companies crossing King street (or Queen street) east, in the city of Toronto, and for an order determining the proportion to be borne by the said railways and other parties interested of the costs and expenses incident to the construction and maintenance of said bridge, including damages to any property which may be injuriously affected thereby. (Application 1621.)

Stands to be dealt with when Toronto viaduct question decided.

960. Application of the Canadian Pacific Railway Company for authority to lay an extra track across the public road at Janetville, Ontario. (Application 5324. Case 2702.)

Order made granting leave to cross.

961. Application of the Essex Terminal Railway for authority to construct its railway across the Windsor, Essex and Lake Shore Rapid Railway on the gravel road, township of Sandwich, East, Ontario. (Application 3846. Case 544.)

Application granted. Order issued. Question of cost of providing and maintaining interlocking plant reserved until disposition of appeal to Supreme Court.

962. Application of the Canadian Northern Quebec Railway for authority to take part of lot No. 448 in the parish of St. Stanislaus for purposes of deviating highway on the west side of River Batiscan. (Application 3986. Case 3126.)

Order made granting application.

963. Complaint of the municipal council of the county of Victoria and township of Emily *re* Grand Trunk Railway station at Omemee, Ontario. (Application 1342.)

Order made directing Grand Trunk Railway trains each way to stop at the outer or junction station, and certain other trains to stop at the new down-town platform. Service to commence September 15, 1908. Platform ordered on Sturgeon street.

964. Application of the Canadian Pacific Railway Company for authority to construct branch line to premises of Shearer, Brown and Wills and the Sherwin-Williams Paint Company, Montreal. (Application 5508. Case 2154.)

Application granted. Order issued.

965. Application of the Grand Trunk Railway Company for authority to construct a branch line to the premises of the George Matthews Company, Limited, Peterborough, Ontario. (Application 5653. Case 3022.)

Application granted. Order issued.

966. Application of the Ontario Power Company *re* crossing with transmission wires over the Grand Trunk Railway between concessions 6 and 7, lots 23 and 24, township of Crowland. (Application 7587. Case 330.)

Application granted. Order issued.

967. Application of the town of Montreal west and others, for an order directing the Canadian Pacific Railway to continue to maintain a public highway crossing between Crescent and Fenwick avenues, Montreal west, Quebec. (Application 7455. Case 3257.)

Application granted. Order made continuing the injunction. Compelling railway company to maintain public highway crossing.

968. Application of the Canadian Pacific Railway Company for authority to construct tracks across and along St. Patrick street and Atwater avenue, Centre street and River St. Pierre, Montreal, Quebec. (Application 6550. Case 2777.)

Application granted. Order issued.

969. Application of the Canadian Pacific Railway Company for authority to construct a spur to the premises of the Canada Sugar Refining Company, Montreal, Quebec. (Application 6352. Case 2685.)

Application granted. Order issued.

970. Application of the Canadian Pacific Railway Company for authority to construct its tracks across and along St. Patrick, Richmond and Richardson streets, Montreal, Quebec, in connection with Canada Sugar Refining Company spur. (Application 6352. Case 2776.)

Application granted. Order issued.

971. Application of the Canadian Pacific Railway Company for authority to construct a branch line to premises of Sherwin-Williams Paint Company, Montreal, Quebec. (Application 6350. Case 2683.)

Application granted. Order issued, subject to conditions set forth in order.

972. Application of the Canadian Pacific Railway Company for an order rescinding or varying order of the Railway Committee, dated May 18, 1898, *re* trestle bridge carrying branch line to Dickson's Mills, Peterborough, Ontario. (Application 3784. Case 500.)

Stands. Subsequently an order was issued dismissing the application.

973. Application of the Peterborough Radial Railway for an order amending order dated June 16, 1904, *re* Lock street, Peterborough, Ontario. (Application 650. Case 2996.)

Application granted. Amending order issued.

974. Application of the Canadian Pacific Railway Company for leave to construct branch lines in the town of Parry Sound, Ontario. (Application 3098.)

Order issued, granting application in terms of consent.

975. Application of the Canadian Northern Ontario Railway for authority to construct a branch line in the town of Parry Sound, Ontario. (Application 3939. Case 625.)

Order issued, granting application in terms of consent.

976. Application of the Canadian Northern Ontario Railway for authority to construct and maintain a deviation of the Great North Road, Parry Sound, Ontario.

Application granted.—Order. issued.

977. Application of the Grand Trunk Pacific Railway for authority to cross the tracks of the Winnipeg Electric Street Railway at Pembina highway, Winnipeg, Manitoba. (Application 6991. Case 3025.)

Application granted. Order issued. The protection to be agreed upon between parties.

978. Application of the Winnipeg Electric Railway for authority to cross with transmission wires the Canadian Pacific Railway tracks in St. Boniface, Manitoba. (Application 2290. Case 3077.)

Application granted. Order issued.

979. Application of the Winnipeg Electric Railway for authority to carry transmission wires across Canadian Pacific Railway tracks at Canadan Pacific Railway Lac du Bonnet branch, section 35, township 13, range 9, west of 1st meridian, Manitoba. (Application 2293. Case 3075.)

Application granted. Order issued.

980. Application of the Winnipeg Electric Railway for leave to carry transmission wires across Canadian Pacific Railway tracks in section 25, township 12, Manitoba. (Application 2291. Case 3075.)

Application granted. Order issued.

981. Application of the Winnipeg Electric Railway for authority to carry transmission wires across the Canadian Pacific Railway tracks in section 17, township 12, Manitoba. (Application 2292. Case 3074.)

Application granted. Order issued.

982. Application of the Canadian Northern Ontario Railway for authority to carry telegraph wires across Grand Trunk Railway tracks near Gamebridge, Ontario. (Application 3937. Case 623.)

Application granted. Order issued.

983. Application of the Canadian Northern Quebec Railway for authority to cross the tracks of the Canadian Pacific Railway east of Lorette, Quebec. (Application 5337. Case 1944.)

Application granted. Order issued.

984. Application of the Canadian Pacific Railway for an order fixing compensation to be paid by the Grand Trunk Railway for use and enjoyment of the right of way between Nipissing Junction and North Bay, including service and accommodation provided at present and since July 2, 1907. (Application 7439. Case 3243.)

Application dismissed. Leave granted to appeal to Supreme Court.

985. Complaint of J. R. Sonley, Blackwater, Ontario, *re* damage to his farm property by the Grand Trunk Railway. (Application 4539. Case 1209.)

Application dismissed.

986. Application of the town of Steelton, Ontario, for an order directing the Canadian Pacific Railway to operate a station with proper accommodation and facilities at Steelton, Ontario. (Application 1525. Case 3113.)

Application withdrawn.

987. Application of the Ottawa Electric Railway for authority to cross Chaudiere branch of the Grand Trunk Railway into the Export Lumber Company's yards, Ottawa. (Application 7263. Case 3134.)

Application dismissed.

988. Application of the city of Ottawa, Ontario, for an order amending order No. 3684, dated March 13, 1907, in *re* widening of Somerset street bridge, Ottawa, Ontario. (Application 326. Case 396.)

Application granted. Order issued directing bridge to be built within 6 months from date.

989. Application of the Georgian Bay and Seaboard Railway for authority to cross the tracks of the Lindsay, Bobcaygeon and Pontypool Railway in the town of Lindsay, Ontario. (Application 3187.)

Application granted. Order issued.

990. Complaint of Dr. Charette, Notre Dame des Neiges, *re* Montreal Park and Island Railway. (Application 6320. Case 2864.)

Complaint dismissed.

991. Application of the Windsor, Essex and Lake Shore Rapid Railway for an order directing the Pere Marquette Railway to interchange traffic at Kingsville, Ontario. (Application 6817.)

Application struck off list. To be reinstated at request of applicant.

992. Application of the Quinze and Blanche River Railway for approval of location through part of the township of Guigues, Quebec, across Quinze river, through adjoining Indian reserve and township of Nedeles and through township of Casey, Harley and Dyment to New Liskeard, Ontario. (Application 7452. Case 3253.)

Application granted. Order issued.

993. Application of E. D. Smith, of Winona, Ontario, for joint freight tariffs between the railway companies at Hamilton and the Hamilton, Grimsby and Beamsville Electric Railway. (Application 6789.)

Application withdrawn.

994. Application of the Canadian Northern Ontario Railway, under section 194 of the Railway Act, for leave to erect, place and maintain its wires across the tracks of the Grand Trunk Railway north of Mount Albert, Ontario. (Application 3935 Case 621.)

Application granted. Order issued.

995. Application of the Grand Valley Railway, under section 59 of the Railway Act, for approval of its location between the city of Brantford and the city of Woodstock, Ontario. (Application 737. Case 3116.)

Application granted. Order issued.

996. Application of the Sarnia Street Railway, under section 235 of the Railway Act, for authority to cross the tracks of the Grand Trunk Railway at Sarnia, Ontario. (Application 7347. Case 3211.)

Application granted. Order issued on consent of all parties.

997. Application of the Guelph and Goderich Railway, under section 227 of the Railway Act, for authority to cross the tracks of a spur of the Grand Trunk Railway in the town of Listowel, Ontario. (Application 7540. Case 3286.)

Application granted. Order issued.

998. Application of the Canadian Northern Ontario Railway, for an order, under section 227 of the Railway Act, granting authority to place its lines or tracks across the lines or tracks of the Canadian Pacific Railway at a point on lot 11, concession 2, township of Nepean, county of Carleton, near Bell's Corners, Ontario. (Application 6254. Case 2647.)

Order made for overhead crossing, provision made for double tracking. If grade changed; extra expense caused to be borne by Applicant; or if disputed to be fixed by Board.

999. Application of the Canadian Northern Ontario Railway, under section 237 of the Railway Act, for authority to construct its railway across certain highways in the township of Clarence at mileages 29, 30, 31, 32 and 33 and across Mill street in the village of Rockland, Ontario. (Application 4843. Case 1526.)

Application granted. Leave reserved to corporation to apply for protection if works prove dangerous.

1000. Application of the Grand Trunk Railway, under sections 256 and 257 of the Railway Act, for an order directing the Canadian Pacific Railway to reconstruct and maintain in a good condition of repair the subway carrying the line of the Brockville and Ottawa Railway under the main line of the Grand Trunk Railway at mile

post 124·96, a short distance east of the Grand Trunk Railway station in the city of Brockville, Ontario. (Application 6972. Case 3015.)

Order made for payment of amount to be expended by Grand Trunk Railway in repair of subway.

1001. Application of the Canadian Pacific Railway, under section 167 of the Railway Act, for an order to construct a new road from the proposed station location at mile post 22 on plan and profile filed with the Board, to the road that runs to the village of Bolton, Ontario. (Application 2023. Case 3235.)

Order made approving of location. Concrete culvert at forced road 5 x 6, gravel to be 10 inches thick, and equal to top dressing of Toronto and Sudbury line.

1002. Application of the Toronto and York Radial Railway, under section 227 of the Railway Act, for authority to cross the tracks of the Grand Trunk Railway at the village of Sutton, Ontario. (Application 7460. Case 3333.)

Application granted. Order issued.

1003. Application of the city of Toronto, under sections 237 and 238 of the Railway Act, and in accordance with the provisions of an agreement made between the applicants and the Grand Trunk Railway dated October 12, 1903, for an order requiring the Grand Trunk Railway to protect by means of gates, semaphores, and derails the tracks of the Toronto Railway Company at the crossing of Front street, Toronto, Ontario. (Application 231. Case 3254.)

Application granted. Order issued, derails to be placed 100 feet from crossing.

1004. Application of the Grand Trunk Railway for authority to cross with two tracks the tracks of the Montreal, Park and Island Railway at two different points near the eastern and western extremities of the new freight yards at Turcot, province of Quebec. (Application 6023. Case 2564.)

Application removed from list. Leave given to either party to reinstate on ten days' notice.

1005. Application of the Canadian Pacific Railway Company, under section 257 of the Railway Act, for leave to construct new bridge at mile 19·86, Farnham section crossing Richelieu street, St. Johns, province of Quebec. (Application 5133. Case 2893.)

Application withdrawn.

1006. Application of the Canadian Pacific Railway, under the Railway Act, directing that a case be stated for the opinion of the Supreme Court of Canada as to the legal effect of the covenant contained in deed from David S. Leach and Dame Jessie R. Leach to the Atlantic and Northwest Railway Company, dated 28th of June, 1888, in connection with the application of the town of Montreal West and others for an order directing the Canadian Pacific Railway to continue to maintain and operate a public highway crossing at lot official No. 138, parish of Montreal, province of Quebec, at a point where it has heretofore maintained the said railway crossing between Fenwick avenue on the one side and Crescent avenue on the other. (Application 7455. Case 3257.)

Application dismissed.

1007. Application of the town of Ingersoll, under section 227 of the Railway Act, for an order directing the Grand Trunk Railway to provide gates and day and night watchman at Thames street where the Grand Trunk Railway crosses same in the town of Ingersoll, Ontario. (Application 5087.)

NOTE.—The question to be considered is the apportionment of the cost reserved as to whether or not gates should be installed as well as watchman.

Application granted. Order made directing Grand Trunk Railway to erect gates to be operated from 6 a.m. to 11 p.m. daily. Cost of erecting, maintaining and operating to be borne by Grand Trunk Railway. Work to be completed within 45 days from November 10, 1908.

1008. Application of A. Pilon, Casselman, Ontario, for an order fixing the additional sum to be charged by the Canada Atlantic Railway (Grand Trunk Railway) for switching and handling of traffic at his siding. (Application 5754. Case 2358.)

Application dismissed.

1009. Application of the Sydenham Glass Company for the extension of the commodity rates on glass bottles prescribed in the judgment of the Board, dated July 30, 1904, so as to include glass jars. (Application 1827. Case 1109.)

Settled by Père Marquette Railroad filing supplement to joint tariff, providing for rate of 13 cents per 100 pounds on glass fruit jars from Wallaceburg to Hamilton, Ontario.

1010. Complaint of the British American Oil Company *re* refusal of the Grand Trunk Railway to carry crude oil originating at Stoy, Illinois, and destined to Toronto, Ontario, at fifth-class rate with official classification. (Application 7529. Case 3269.)

Judgment reserved. Delivered subsequent to March 31, after a re-hearing, and will appear in next annual report.

1011. Application of the Canadian Pacific Railway under sections 284 and 317 of the Railway Act, for an order directing the Grand Trunk Railway to receive passenger and baggage cars, and also deliver same at the junction of the tracks of the Ottawa, Northern and Western Railway and the Canada Atlantic Railway, near Sapper's bridge, Ottawa, Ontario. (Application 4887. Case 1541.)

Application stands to be disposed of with Grand Trunk Railway application in *re* compensation by Canadian Pacific Railway for use of Central station, Ottawa. Subsequently an order was made dismissing the application.

1012. Application of the Canadian Pacific Railway under provisions of certain cases from the Crown, fixing the terms and conditions under which the Canadian Pacific Railway may use the passenger station and passenger tracks and approaches in connection therewith, situated on ordnance lands of the Crown, that portion of the Rideau Canal reserve extending from Sappers bridge southward to Hurdman's bridge road, Ottawa, Ontario. (Application 3862. Case 415.)

Stands for judgment. Disposed of subsequent to March 31 after a rehearing, and will appear in next annual report.

1013. Application of the Grand Trunk Railway, under section 178 of the Railway Act, for authority to take for the purposes of its railway part of lots Nos. 73 and 74 on the south side of Chestnut street, in the village of Bridgeport (now known as Jordan), county of Lincoln, Ontario, and immediately opposite the Grand Trunk Railway station at Jordan, Ontario. (Application 7836. Case 3504.)

Application granted. Order issued. Full compensation to be made for the lands taken.

1014. In *re* application of the Windsor and Tecumseh Electric Railway, under section 177 of the Railway Act of 1903, for leave to cross the line or track of the Grand Trunk Railway on Sandwich street, Walkerville, Ontario, and also two spurs or sidings of the Grand Trunk Railway in the township of Sandwich East, county of Essex. (Application 3803. Case 514.)

Application granted. Order issued. Electric cars to slow down to four miles per hour at crossing and railway company to flag their cars across.

1015. Application of the Grand Valley Railway for authority to cross the tracks of the Grand Trunk Railway in the city of Brantford, Ontario. (Application 7550. Case 3299.)

Application granted. Order issued.

1016. Application of the Grand Valley Railway for authority to cross the tracks of the Toronto, Hamilton and Buffalo Railway near Brantford, Ontario. (Application 7551. Case 3294.)

Application granted. Order issued.

1017. Application of the Grand Valley Railway for authority to cross the tracks of the Brantford and Hamilton Electric Railway in the city of Brantford, Ontario. (Application 7552. Case 3295.)

Application granted. Order issued.

1018. Application of the township of the Front of Escott for an order directing the Grand Trunk Railway to provide and construct immediately to the east of the present crossing a suitable overhead crossing, two and a half miles west of Malleytown, Ontario. (Application 4452. Case 1118.)

Application dismissed with leave to applicant to revive same.

1019. Application of the Walkerton and Lucknow Railway Company, under section 237 of the Railway Act, for authority to carry its line of railway across College, Bruce, Countess, Garafraxa, Elgin, Kincardine and Rock streets in the town of Durham, Ontario. (Application 4558. Case 1230.)

NOTE.—In connection with the above application will be heard the application of the town of Durham for consideration of the protection to be afforded at the said crossings.

Order issued in terms of an agreement between the parties filed.

1020. Application of the Grand Trunk Railway Company, under section 29 of the Railway Act, for an order amending the order of the Board dated June 18, 1904, by directing the Peterborough Radial Railway to install and maintain derails on each side of the crossing of its railway of the tracks of the Grand Trunk Railway at (1) Charlotte street, (2) Water street, Peterborough, said derails to be placed 100 feet from the nearest Grand Trunk Railway track. (Application 650. Case 3464.)

Order issued, directing interlocker at Charlotte street. Application as to Water street stands.

1021. Application of the Grand Trunk Railway Company for authority to construct a branch line to the premises of Schultz Brothers, Brantford, Ontario. (Application 7738. Case 3479.)

Application granted. Order issued. Leave reserved to city of Brantford to renew application for planking between rails if so advised.

1022. Application of the Canadian Pacific Railway Company under section 178 of the Railway Act, for authority to take additional lands adjoining their railway in the township of Albion, county of Peel, being composed of the south half of the west half of lot 10, in the fifth concession of the township of Albion, county of Peel, Ontario. (Application 7654. Case 3342.)

Application granted. Order issued.

1023. Complaint of the town of Napanee *re* insufficient protection of highway crossing at Centre and Thomas streets by Grand Trunk Railway and Bay of Quinte Railway. (Application 3287.)

Complaint dismissed.

1024. Application of the Canadian Northern Quebec Railway for an order directing the Canadian Pacific Railway to stop its trains carrying passengers and mail at the crossing of the Canadian Northern Quebec Railway at St. Jerome at times convenient to afford reasonable opportunity for transfer of passengers and mail between said railways and to furnish reasonable facilities and accommodation for such purpose. (Application 7902. Case 3541.)

Order made directing Canadian Pacific Railway to stop its passenger trains at St. Jerome diamond. Applicant company to construct platform and supply proper conveniences for transfer of passengers.

1025. Application of the Canadian Pacific Railway Company for an order approving proposed changes and alterations in its railway from its station at Pembroke, Ontario, to a point about 3,200 feet west of said station. (Application 5051. Case 1670.)

In connection with the above application will be noted that the applicant company have obtained an order in council, dated May 6, 1908, approving of the plans

of the trestle altered in accordance with the plans on file with the Board, and that these altered plans be now submitted to the Board for its approval.

Application granted. Order issued, in terms of consent agreed to by all parties.

1026. Application of the St. Paul Land and Hydraulic Company for an order varying and defining order of the Board dated October 4, 1906, upon the application of the Canadian Pacific Railway Company for a deviation of a portion of a branch line on the south side of the Lachine canal, Quebec. (Application 1088. Case 1537.)

Judgment of the Board vacating order of October 4, 1906. No order to issue for three months, during which time both companies are to consider their respective positions. Subsequently Canadian Pacific Railway made application for deviation, and Board, after hearing application, approved of deviation, subject to certain conditions agreed upon by counsel.

1027. Application of the Board of Trade of Portage la Prairie, Manitoba, under section 323 of the Railway Act, for an order disallowing the special freight tariffs of the Canadian Pacific Railway Company, Nos. W-1000, C.R.C., 644, and W-1006, C.R.C., 652, as being illegal; and

The complaint of the Winnipeg and other boards of trade, mercantile bodies, and shippers objecting to the new tariffs recently put into force by the Canadian Pacific Railway Company of western Canada in substitution for the 'traders tariffs,' so-called, previously in existence. (Application 5664.)

Application refused.

1029. Application of S. H. Jones, of Sabrevois, Quebec, for an order directing the Dominion Express Company and the American Express Company to provide an efficient service for the carriage of express traffic from Sabrevois, Quebec, on Monday morning as well as on other days of the week. (Application 6815.)

Application dismissed.

1029. Application of the Grand Trunk Railway for a decision on the question of interlocking plants and responsibility of the senior company for accidents arising out of the negligence of the men in charge. (Application 7815.)

Judgment appears in appendix.

1030. Application of the Grand Trunk Railway Company under section of the Railway Act, for an order permitting the applicant company's engines and trains to approach and pass without stopping over the drawbridge carrying its main line of railway between Hamilton and Niagara Falls, Ontario, across the old Welland canal at the west end of the applicant company's yard at Merritton, Ontario. (Application 7899. Case 3538.)

Application granted. Order issued. Grand Trunk Railway to keep the bridge key and to open bridge upon application.

1031. Application of the Canadian Pacific Railway Company, under section 176 of the Railway Act, for an order fixing the compensation to be paid by the Grand Trunk Railway for the use and enjoyment of the right of way and tracks of the Canadian Pacific Railway between Nipissing Junction and North Bay, Ontario, and the terminals, stations and station grounds of the Canadian Pacific Railway at North Bay, including service and accommodation provided, and at present and since July 2, 1907, used and enjoyed by the Grand Trunk Railway without compensation being paid therefor. (Application 7439. Case 3243.) (Argument heard at Ottawa, June 24, 1908.)

Application dismissed. Leave granted to appeal to Supreme Court.

1032. Application of the Mount McKay and Kakabeka Falls Railway Company, under section 227 of the Railway Act, for authority to cross the tracks of the Canadian Pacific Railway at Yonge street, Fort William, Ontario. (Application 5585. Case 2281.)

Application granted.—Order issued.

1033. Application of the Mount McKay and Kakabeka Falls Railway Company, under section 227 of the Railway Act, for authority to cross the tracks of the Cana-

dian Pacific Railway at Mactavish street, Fort William, Ontario. (Application 5585. Case 2280.)

Stands adjourned at request of parties.

1035. Application of the Mount McKay and Kakabeka Falls Railway Company, under section 227 of the Railway Act, for authority to cross the tracks of the Canadian Northern Railway at Francis street, Fort William, Ontario. (Application 5585. (Application 5585. Case 2276.)

Application granted. Order issued.

1035. Application of the Moun McKay and Kakabeka Falls Railway Company, under section 227 of the Railway Act, for authority to cross the tracks of the Canadian Northern Railway at Francis street, Fort William, Ontario. (Application 5585. Case 2277.)

Stands adjourned at request of parties.

1036. Application of the Mount McKay and Kakabeka Falls Railway Company, under section 227 of the Railway Act, for authority to cross the tracks of the Canadian Northern Railway at Yonge street, Fort William, Ontario. (Application 5585. Case 2279.)

NOTE.—The above applications are set down for the purpose of enabling the parties to give such additional evidence as they may desire.

Application granted. Order issued.

1037. Application of the Grand Trunk Pacific Railway Company, under sections 222 and 235 of the Railway Act, for an Order authorizing it to construct, maintain and operate a branch line or spur along Neebing avenue from Montreal street to Kaministiquia river, Fort William, Ontario. (Application 6822. Case 3106.)

Application refused.

1038. Application of the corporation of the city of Fort William, Ontario, under section 262 of the Railway Act, for an order directing the Canadian Northern Railway Company to abandon using its loop line along Arthur and Vickers streets, in the city of Fort William, and further directing the said railway company to operate all its trains on the original straight line right of way established by the Port Arthur Duluth and Western Railway Company. (Application 5549. Case 2193.)

Application stands sine die at request of counsel for the town.

1039. Application of the Grand Trunk Railway Company, under section 237 of the Railway Act, for leave to cross with its spur the spur track of the Canada Southern Railway in the Grand Trunk Railway Company's south yard at Fort Erie, Ontario. (Application 6833. Case 2913.)

Application granted. Order issued.

1040. Application of the Napierville Junction Railway, under section 237 of the Railway Act, for leave to connect its track with the track of the Grand Trunk Railway near Lacolle, Quebec. (Application 6952. Case 2989.)

Application granted. Order issued.

1041. Application of the Canadian Pacific Railway Company as lessee of the Georgian Bay and Seaboard Railway, under section 177 of the Railway Act, 1903, for an Order authorizing the company to construct, maintain and operate a crossing of the Grand Trunk Railway Company's spur to an ice house for the town of Orillia, on the shore of Lake Couchiching. (Application 3021.)

Struck off list. Not to be placed on again except on notice.

1042. Application of the municipal council of the township of Hagar, under section 237 of the Railway Act, for an Order directing the Canadian Pacific Railway to provide and construct a suitable public crossing between lots 12 and 13, concession 3, in the said township. (Application 5055. Case 1642.)

Application granted. Order to issue in terms of consent minutes filed.

1043. Application of the St. John Railway Company for authority to continue to operate their line across the tracks of the Canadian Pacific Railway in the parish

of Lancaster, in the city and county of St. John, without installing any interlocking or other similar appliances for the space of twelve months from the date of application. (Application 2463.)

Order made amending Order of 14th June, 1906, and providing that municipality and St. John Railway pay applicant company ⅓ each of cost of watchman, also that municipality and St. John pay applicant company ⅓ wages of watchman from 1st July, 1906, to 18th January, 1909.

1044. Application of the Canadian Northern Ontario Railway, under section 159 of the Railway Act, for sanction and approval of the location of railway through townships of Westmeath, Pembroke and Stafford, county of Renfrew, mileage 73·5 to mileage 91·3 north from Ottawa. (Application 3561. Case 2579.)

Application granted. Order issued approving location as to the townships mentioned.

1045. Application of the Bell Telephone Company, under section 246 of the Railway Act, for leave to erect, place and maintain its wires across the tracks of the Schomberg and Aurora Railway Company, at public crossing, Main street, Schomberg, Ontario. (Application 7938. Case 3565.)

Application granted. Order issued.

1046. Application of the city of Ottawa, under sections 237, 238, 240 and 241 of the Railway Act, 1903, for an Order directing the Grand Trunk Railway to reconstruct the bridge by which the railway passes over Preston street, Ottawa, and to maintain the same in such manner as to afford safe and adequate facilities for all traffic passing under such structure. (Application 8120. Case 3690.)

Order made directing Grand Trunk Railway Company to build bridge, detail plans to be submitted by May 11, 1909. Bridge to be completed by October 10, 1909. Cost to be divided equally between applicant and railway company, but city's share not to exceed the sum of $3,000.

1047. Application of the Père Marquette Railway Company, under subsection (x) of section 3 of the Lord's Day Act, 6 Edward VII., chapter 27, permitting the said company, its servants, workmen and agents to do on Sunday any work incidental to the operation of their international car ferry, the Canadian port of which is Port Stanley, in Lake Erie, and which work is incidental to the continuance to its destination of freight in transit or in cars forming part of a train in transit at the beginning of such Sunday, notwithstanding that the cars containing such freight and forming part of any train so in transit have to be separated from the train for the purpose of loading the same or unloading the same from such car ferries, and awaiting the return of the car ferry with the remainder of the said train, and may require to be switched, shunted or otherwise dealt with, to enable such train to proceed to its destination. (Application 7588. Case 3301.)

Order made granting application.

1048. Application of James Greer, of Toronto, Ontario, under section 355 of the Railway Act, 1903, for an Order directing the Bell Telephone Company to provide him with a telephone at his residence, 230 Bleecker street, at the telephone rate of $30 per annum, instead of as a business telephone at $50 per annum. (Application 7746.)

Application dismissed.

1049. Application of the Canadian Association of Amateur Oarsmen, under subsection 3 of section 321 of the Railway Act, for an Order directing the railway companies comprising the Canadian Freight Association, to give racing shells a rating under the Canadian classificaton No. 13, on the ground that the rates quoted by the railway companies for the transportation of racing shells are excessive, and in many instances prohibitive. (Application 7535.)

Stands *sine die;* to be brought up on notice.

1050. Complaint Canadian Canners, Limited, respecting freight charges on a carload of canned vegetables from Trenton, Ontario, to Englehart, Ontario, on the

Temiskaming and Northern Ontario Railway, via Central Ontario Railway to Central Ontario Junction, thence via Canadian Pacific Railway to North Bay. (Application 7922.)

Complaint dismissed.

1051. Complaint of H. S. Conn, merchant, Ottawa, Ontario, respecting intersection freight rates on hay from points on the Montreal and Ottawa section of the Canadian Pacific Railway. (Application 7019.)

Complaint withdrawn.

1052. Consideration and formulation of rules and regulations for the safe transportation of explosives and other dangerous articles. (Application 1717.)

Standing for judgment.

1053. Application of George Lawrence, M.P.P., on behalf of the residents of the vicinity of Killarney, Manitoba, for an Order requiring the Canadian Pacific Railway Company and the Canadian Northern Railway Company to provide a transfer track at Holmfield and Boissevain, Manitoba, for interchange of traffic. (Application 4929.)

Application granted. Order issued for transfer tracks to be constructed by company in three months. Half cost to be paid by Canadian Northern Railway upon completion.

1054. Application of the Canadian Pacific Railway, under section 222 of the Railway Act, for authority to construct, maintain and operate a branch line or spur in township 11, range 4, east of the 1st meridian, commencing from a point on centre line of the Molson cut-off of the said railway, distant about 165 feet easterly, measured along the said centre line from the southerly boundary of the southeast quarter of section 23, in the said township, thence in a northerly direction along the road allowance between sections 23 and 24 and 25 and 26, to and into the premises of the Bird's Hill Sand Company, situate on the southeast quarter of section 35 in the said township, a distance of about 15,200 feet. (Application 5680. Case 2308.)

Application granted. Order issued.

1055. Application of the Canadian Pacific Railway Company for authority to expropriate certain additional lands, belonging to Samuel Buchanan, adjoining the station for the purpose of making a Y in the town of Neepawa, Manitoba. (Application 8217. Case 3764.)

Application granted. Order issued.

1056. Application of the city of Winnipeg, Manitoba, for Order directing the Canadian Pacific Railway Company to provide and construct a suitable highway crossing over its line of railway between Talbot avenue and Carter avenue, or in the alternative to allow the city to construct such crossing, or for such Order as the Board may deem meet. (Application 8223. Case 3769.)

Application granted. Expense of grading, planking, &c., required at crossings to be borne by the city of Winnipeg.

1057. Application of the city of Winnipeg, Manitoba, under section 277 of the Railway Act, for an Order directing the Canadian Pacific Railway to provide and construct a suitable highway crossing, or in the alternative to allow the said city to construct such highway crossing over the spur track known as the Brown and Rutherford spur, where the extension of Sutherland avenue, in the city of Winnipeg, extending in right lines, intersects said spur under the right of way therefor. (Application 8224. Case 3770.)

Application granted. Order by consent for crossing at expense of applicants. City to maintain and protect, if necessary.

1058. Application of the Canadian Pacific Railway Company, under section 258 of the Railway Act, for approval of its proposed new station and re-arrangement of its yards at St. Boniface, in the province of Manitoba. (Application 5472. Case 2096.)

Application granted. Order issued approving plan as amended.

1059. Complaint of the Winnipeg Jobbers' and Shippers' Association, respecting the form of siding agreement used for new sidings by the Canadian Pacific Railway Company. (Application 6770. Case 2877.)

Forms of agreement settled between the parties.

1060. Complaint of the rural municipality of Miniota that the Grand Trunk Pacific Railway Company is proposing to construct level crossings over certain highways in the said municipality of Miniota and application of the municipality for an order directing the railway company to cross the highways by means of overhead crossings. (Application 3680. Case 2883.)

Order made for overhead bridge at the crossing.

1061. Complaint of the municipality of Miniota respecting highway crossings of the Grand Trunk Pacific Railway Company north of the town of Arrow River.

1. Crossing at mileage 31·32 between ranges 25 and 26, W.P.M.

2. Crossing at mileage 31·52.

3. Crossing situated between sections 29 and 30, and 31 and 32, township 13, range 25, W.P.M.

(Application 2633.)

Order made providing for highway crossing to be protected by automatic bell at mileage 31·32. Crossing at mileage 31·52 to be done away with. Crossings between sections 29 and 30 and 31 and 32 granted; to be protected by automatic bell.

1062. Application of the Grand Trunk Pacific Railway Company, under section 237 of the Railway Act, for an Order granting to the company authority to lay its line of tracks across the line or tracks of the Winnipeg Electric Street Railway Company on Pembina highway, Winnipeg, Manitoba. (Application 6991. Case 3025.)

Application granted. Order issued.

1063. Application of the Grand Trunk Pacific Railway, under section 237 of the Railway Act, for an Order approving of its highway crossings from mile 124·00 to mile 141·39 in the province of Manitoba. (Application 6747. Case 2862.)

Application granted. Order issued; company undertaking to have all scrub removed so that clear view of track may be had.

1064. Application of F. F. Brock and R. Muttleberry, of Winnipeg, under the Railway Act, for an Order directing the Grand Trunk Pacific Railway Company to treat with them as owners of certain property in the city of Winnipeg, through which the railway of the Grand Trunk Pacific Railway Company is intended to pass, as to the purchase of the said property. (Application 3272. Case 3798.)

Order issued cancelling order approving location, in so far as it affects the applicants' lands.

1065. Application of Messrs. Short, Cross and Biggar, Edmonton, Alberta, under the Railway Act, for an order directing the Grand Trunk Pacific Railway Company to treat with Messrs. Graves and Ferris as owners of certain property, being on the northeast quarter of section 16-52-21, through which the railway of the Grand Trunk Pacific Railway Company is intended to pass, respecting the purchase of said property. (Application 5401. Case 3796.)

Order made that unless railway company proceed to arbitrate within thirty days from date of location of line, through lands of applicants disallowed, and order allowing location rescinded in part.

1066. Application of the John Arbuthnot Company, Limited, Winnipeg, Manitoba, under the Railway Act, for an Order directing the Grand Trunk Pacific Railway Company to treat with the applicants as owners of certain property in the city of Winnipeg, through which the railway of the Grand Trunk Pacific Railway Company is intended to pass as to the purchase of the said property. (Application 8271. Case 3797.)

Order made cancelling order approving location in so far as affects applicants' lands.

1067. Complaint of the Northern Elevator Company of Winnipeg against the rates charged by the Canadian Pacific Railway for hauling feed cars from the Northern Elevator Company, Winnipeg, to the Canadian Pacific Railway team tracks. (Application 6806.)

Complaint dismissed.

1068. Application of the Western Live Stock Shippers' Association under sections 284 and 317 of the Railway Act, for an Order directing the Canadian Pacific Railway Company and the Canadian Northern Railway Company to furnish certain facilities for the receiving, unloading, accommodation and transportation of live stock traffic. (Application 8234. Case 3774.)

Referred to operating assistant to traffic officers to inspect live stock shipping facilities in western provinces and report to the Board. In meantime matter stands.

1069. Complaint of the Independent Coal Company of Regina, Saskatchewan, *re* excessive demurrage charges by the Canadian Pacific Railway on shipments to the complainants at various points. (Application 5903.)

Order made directing refund to be made by Canadian Pacific Railway of demurrage charged to complainant company.

1070. Complaint of Stockton and Mallinson, Limited, of Regina, Saskatchewan, respecting freight on oranges from California points to Regina. (Application 6622.)

Complaint dismissed.

1071. Application of the Board of Trade of Portage la Prairie, Manitoba, under section 323 of the Railway Act, for an Order disallowing the special freight tariffs of the Canadian Pacific Railway, Nos. W-1000, C.R.C. 644, and W-1006, C.R.C. 652, as being illegal; and

The complaint of the Winnipeg and other boards of trade, mercantile bodies and shippers objecting to the new tariffs recently put in force by the Canadian Pacific Railway in western Canada in substitution for the 'traders' tariffs,' so-called, previously in existence. (Application 6664.)

Application *re* Kootenay rates dismissed. Application *re* Manitoba rates dismissed, but reserved as to application of Ontario town tariffs to western provinces, and as to power of Board to order commodity rates.

1072. Application of the Canadian Northern Railway Company, under section 159 of the Railway Act, for an Order sanctioning and approving of location of its Goose lake branch through the town of Saskatoon, Saskatchewan, and through townships 36, 31, range 5-12, west of the 3rd meridian, mile 0 to 57·96, Saskatchewan. (Application 5891. Case 2469.)

Application granted.—Order issued.

1073. Application of the Canadian Northern Railway Company for an Order under section 237 of the Railway Act, authorizing the company to construct its line of railway across avenues A to P in Spadina Crescent, in the city of Saskatoon, Saskatchewan. (Application 6256. Case 2650.)

Application granted. Order issued.

1074. Application of the Brantford and Hamilton Electric Railway Company, under section 235 of the Railway Act, for authority to carry its railway across Alfred and Murray streets, Brantford, Ontario. (Application 8298. Case 3810.)

Application granted. Order issued.

1075. Application of the township of Cornwall to review, vary or rescind the order of the Board dated the 28th of July, 1908, directing the Grand Trunk Railway Company to install an electric bell at the crossing where the company's railway intersects the public highway in the township of Cornwall. (Application 7285. Case 3152.)

Order made rescinding order No. 5107.

1076. Petition of the residents of Barrington, province of Quebec, on the line of the Grand Trunk Railway Company, county of Huntingdon, regarding proposed change of location of the railway station at that point. (Application 7901.)

Petition dismissed.

1077. Application of the Canadian Pacific Railway Company, under section 178 of the Railway Act, for authority to take additional lands adjoining its railway in the town of St. Paul, province of Quebec. (Application 8388. Case 3875.)

Application granted. Order issued.

1078. Application of the Grand Trunk Railway Company, under sections 222, 235 and 237 of the Railway Act, for leave to construct, maintain and operate a branch line or siding and spurs therefrom, extending from a point in the applicant's railway east of St. Elizabeth avenue, in St. Henri ward, Montreal, thence westerly across St. Elizabeth avenue and upon and along and across Acorn street to the premises of the Simonds Canada Saw Company, Jenkins Brothers, Lang Manufacturing Company and other industries. (Application 3048. Case 3552.)

Application granted. Order issued. Adjacent landowners to be compensated for lands injuriously affected by spur crossing St. Elizabeth avenue, if there be any injury.

1079. Application of the Canadian Northern Ontario Railway Company, under sections 158 and 237 of the Railway Act, for approval of the location of its Udney-Orillia branch line from mileage 0·0 in the township of Mara, in the county of Ontario, to mileage 5·25 in the same township, and for authority to cross the several existing highways. (Application 8437. Case 3913.)

Application withdrawn.

1080. Application of the Brantford and Hamilton Electric Railway Company for an order granting leave to the applicant to operate its cars over the crossing of the tracks of the Tilsonburg branch of the Grand Trunk Railway, Brantford, Ontario, under order of the Board dated March 12, 1908, pending the installation of the interlocking and derailing plant directed to be installed at said crossing. (Application 5847. Case 2443.)

Application granted. Order issued in terms of consent filed by parties.

1081. Complaint of Olive Pringle, barrister, Ottawa, and others, of failure on the part of the Canadian Pacific Railway and Grand Trunk Railway to make connections at Brockville, Ontario, as required by order of the Board dated January 30, 1908. (Application 5320. Case 2863.)

Stands for settlement of terms of Order submitted by Board.

1082. Discussion of regulations proposed by the Board and forwarded to all railway companies subject to the jurisdiction of the Board, under cover of circular No. 23, dated September 16, 1908, relative to equipment and loading of cars, operation of trains, requirements as to train employees and telegraph operators, covering of open drains and handling of crippled cars. (Application 4135 and 1750.)

Dealt with under order No. 5888.

1083. Complaints of H. S. Conn, merchant, Ottawa, *re* rates on hay from West Moncton, Ontario, on the line of the Canadian Pacific Railway Company, from Mitchell and Harley, Ontario, on the line of the Grand Trunk Railway Company to Temagami, Ontario, on the line of the Temiskaming and Northern Ontario Railway, via North Bay, Ontario. (Applications 7920 and 7932.)

Complaints dismissed.

1084. Application of the Toronto, Hamilton and Buffalo Railway, under sections 237, 238, 256 and 257 of the Railway Act, for an Order authorizing the company to renew, reconstruct or alter the highway bridge under which its railway crosses the public highway in the township of Brantford, in the county of Brant, at a point about three miles east of the city of Brantford, and to divert the said highway and

bridge, and authorizing the acquiring of additional land for the company for such purpose. (Application 8017. Case 3626.)

Application refused.

1085. Application of Henry New, Hamilton, Ontario, for an Order, under sections 252 and 253 of the Railway Act, directing the Toronto, Hamilton and Buffalo Railway to provide and construct a suitable crossing where its railway abuts the lands of the applicant, being parts of lots 5 and 6, in the 3rd concession, township of Barton, county of Wentworth, Ontario. (Application 7811. Case 3493.)

Order made directing Toronto, Hamilton and Buffalo Railway to provide crossing at expense of applicant. Crossing to be constructed at once.

1086. Complaint of the town of Welland, Ontario, in regard to dangerous condition of crossing of Grand Trunk Railway and Michigan Central Railroad tracks at Main street, Welland, and applies for protection of said crossing. (Application 8154.)

Order made directing Grand Trunk Railway Company to protect Main street crossing by gates and watchmen. Michigan Central Railroad crossing on South Main street to be protected by flagmen.

1087. Application of the Simpson Brick Company, under the Railway Act, for an order directing the Toronto, Hamilton and Buffalo Railway to supply adequate and suitable accommodation for the receiving and loading of brick and other material on the premises of the Simpson Brick Company, Hamilton, Ontario. (Application 7655. Case 3343.)

Application granted. Order issued.

1088. Application of the Grand Trunk Railway Company, under sections 222 and 237 of the Railway Act, for authority to construct, maintain and operate certain branch lines of railway or sidings in the city of Hamilton, Ontario, and crossing certain roadways to the premises of the Hamilton and Toronto Sewer Pipe Company and the Fowlers Canadian Company. (Application 7035. Case 3051.)

Application granted. Order issued.

1089. Complaint of the citizens of Fort Erie, Ontario, that the freight rates of the Michigan Central Railroad Company from Black Rock, New York, to Fort Erie, Ontario, are discriminatory with respect to the company's rates to Bridgeburg, Ontario, the latter place having been given a preference. (Application 7009.)

Application dismissed.

1090. Application of Charles Slade, under the Railway Act, for an Order directing the Michigan Central Railroad to provide a farm crossing where the tracks of the railway affect his property at lot 12, concession 8, township of Raleigh, Ontario. (Application 914. Case 3238.)

Application granted. Order issued directing crossing to be on the lot line.

1091. Application of Robert MacVicar, of the township of Brooke, county of Lambton, Ontario, for Order, under the Railway Act, directing the Michigan Central Railroad Company to provide and construct two suitable farm crossings where the company's railway intersects his farm on the east half of lot No. 13, and in the west half of lot No. 14, each containing 100 acres, and both in the 5th concession of the township of Brooke, County of Lambton, Ontario. (Application 5023. Case 1641.)

Order for one crossing on the dividing line between the two lots, the railway company to furnish the material, the applicant to do the grading.

1092. Application of the Bell Telephone Company, under the Railway Act, for an order directing the Windsor, Essex and Lake Shore Rapid Railway Company to bear the cost of certain changes in construction of the lines of the applicant, and of certain protection devices rendered necessary by reason of the construction and operation of the railway. (Application 8248. Case 3784.)

Application dismissed without costs.

1093. Application of the corporation of the city of Chatham, under the Railway Act, for an Order directing the Canadian Pacific Railway to provide, construct and

maintain suitable gate or gates at the crossings of the said railway on Wellington and Centre streets, in the said city of Chatham, and electric bells or other automatic system of warning at the crossings of the said railway on Princess, Colborne, Jeffrey, Raleigh, West and Lacroix streets, and further directing that a watchman be kept at each street crossing of the said railway where gates are now provided and maintained, namely, the crossings of King, Adelaide, William and Queen streets, and also at the crossings on Wellington and Centre streets. (Application 3799. Case 2398.)

Order made dismissing the application.

1094. Application of the Windsor, Essex and Lake Shore Railway Company, under the Railway Act, for leave to carry its railway across the highways in the township of Gosfield south and the township of Mersea, and the town of Leamington, county of Essex, Ontario. (Application 6692. Case 2831.)

Application granted. Order issued. Notice of motion to be amended by adding the words 'along and across the highways in' after the word 'and' in the 6th line of the application.

1095. Application of Père Marquette Railway Company, under the Railway Act, for approval of the character of the work in construction of a bridge fifty-two feet in length over the drain known as the Whitebread Tap Drain, where the said drain crosses the lands of the Père Marquette Railway, such drainage work being constructed under and pursuant to the report of F. W. Flater, C.E., under by-laws of the municipal council of the township of Sombra, in the county of Lambton, Ontario, and of the township of Chatham, county Kent, Ontario. (Application 6920. Case 3930.)

Application refused.

1096. Application of the Chatham, Wallaceburg and Lake Erie Railway Company, under the Railway Act, for an order providing for the interchange of freight traffic between Chatham, Wallaceburg and Lake Erie Railway Company, county Kent, Ontario, and at the town of Wallaceburg, county Kent, Ontario, and regulating the rates to be charged therefor by the respective roads interested. (Application 1821. Case 1665.)

Application withdrawn.

1097. Application of the Windsor, Essex and Lake Shore Rapid Railway Company, under the Railway Act, for an order directing the Père Marquette Railway Company to interchange traffic with the Windsor, Essex and Lake Shore Rapid Railway Company at Kingsville, Ontario. (Application 6817.)

Application granted. Order issued in terms of letter dated October 17, 1908, from A. Patriarche to F. E. Low.

1098. Application of the Canadian Pacific Railway for Order, under the Railway Act, directing the Père Marquette Railway Company to afford suitable and sufficient accommodation for the proper interchange and interswitching of traffic between the railway of the Père Marquette Railroad Company and the railway of the applicant in the city of Chatham, Ontario. (Application 7990. Case 3598.)

Stands pending settlement of formal Order by railway companies interested.

1099. Complaint of Wellington Wigle, under the Railway Act, of refusal on the part of the Père Marquete Railway Company to carry passengers on its local freight trains. (Application 8348. Case .)

Application dismissed. If applicant desires to continue application he will only be allowed to do so upon payment of costs.

1100. Complaint of Wellington Wigle, of Kingsville, Ontario, alleging excessive passenger rates charged by the Windsor, Essex and Lake Shore Rapid Railway Company on passenger traffic. (Application 8347. Case .)

Application dismissed. If applicant desires to continue application he will only be allowed to do so upon payment of costs.

1101. Application of the Montreal and Southern Counties Railway Company, under section 157 of the Railway Act, for approval and sanction of its line of railway

between Montreal and St. Lambert, province of Quebec. (Application 6731. Case 2692.)

Application granted. Order issued.

1102. Application of the Canadian Pacific Railway, under the Railway Act, for an order to compel the People's Telephone Company, of Sherbrooke, province of Quebec, and E. P. Smith, of Johnville, province of Quebec, to remove their telephone wires where they cross the tracks of the applicant company, near Johnville station, province of Quebec. (Application 6827. Case 3574.)

Order issued authorizing crossing, subject to usual conditions.

1103. Application of Calixte Franche, of Wendover, Ontario, under sections 252 and 253 of the Railway Act, for an Order directing the Canadian Northern Railway to provide a suitable farm crossing where his property is affected by the railway. (Application 7858. Case 3512.)

Application dismissed.

1104. Complaint of the municipal council of the township of Somerville of failure on the part of the Grand Trunk Railway to provide and maintain a proper station at the centre line in the township of Somerville, for the loading and unloading of traffic. (Application 7991).

Complaint withdrawn pending negotiations for a settlement. Leave to reinstate on ten days notice without application.

1105. Petition of the residents of Fern Glen or Wells Crossing (a flag station on the Canada Atlantic division of the Grand Trunk Railway) that the Grand Trunk Railway Company be required to stop its passenger trains, so as to afford accommodation to the travelling public at that point. (Application 7249.)

Order made to stop mixed trains on flag. Railway company may at any time move to rescind Order.

1106. Application of the Canadian Northern Ontario Railway, under Section 227 of the Railway Act, for leave to operate its trains under the tracks of the Canadian Pacific Railway where it crosses under same at Little Key river, township of Mowat, District of Parry Sound, Ontario. (Application 1863. Case 3588.)

Application granted. Slow Order removed upon Canadian Pacific Railway submitting plans providing for 16 foot clearance and remodelling to provide for same. Applicant company to pay half the cost. Work to be done in fifty days.

1107. Application of the Canadian Northern Ontario Railway, under section 177, for approval of the location of interlocking plant and equipment at the Canadian Northern Ontario Railway crossing of the Grand Trunk Railway at Hawkesbury, Ontario, (Crossing Order No. 2030, dated November 12, 1906.) Application 2527. Case 2123.)

Order made directing telephone connection to be installed by Canadian Northern Ontario Railway within ten days.

1108. Application of the Canadian Northern Quebec Railway to take part of lot 8, parish of Longue Pointe, belonging to Montreal Protestant House of Refuge and Industry, county of Hochelaga, said land being necessary for the construction of a 'Y.' (Application 8651 . Case 4051.)

Application granted. Order for expropriation of the triangle marked 4 on plan and for 50 feet on south side of track running through the lands in question.

1109. Complaint of Hon. Senator Tessier, of refusal by the Ottawa Electric Railway Company, to furnish free transportation to him as a member of the Senate of Canada over its lines of railway. (Application 8049.)

Complaint withdrawn.

1110. Application of the St. Maurice and Champlain Telephone Company, under section 245 of the Railway Act, for an Order directing the Canadian Pacific Railway to permit the applicants to make telephonic connection and communication with the ticket office and freight office of the company at Louiseville, Maskinonge county,

Yamachichi, St. Maurice county; Batiscan, Ste. Anne de la Perade and Lac a la Tortue, Champlain county. (Application 8581. Case 4021.)

Application granted. Order issued in usual terms.

1111. Application of the Canadian Pacific Railway under section 176 of the Railway Act, for authority to take possession of parts of the south halves of lots 34 and 35, 3rd concession, township of Humphrey, district of Parry Sound, Ontario, belonging to the Canadian Northern Ontario Railway. (Application 7522. Case 3271.)

Order granted for taking of lands as shown on plan and in the application.

1112. Application of the Grand Trunk Railway, under sections 222 and 237 of the Railway Act, for authority to construct, maintain and operate certain branch lines of railway, on lot No. 5 in the 12th concession of the township of Tay, county of Simcoe, Ontario, thence northerly crossing part of said lot 5, the side road between lots 5 and 6 in said concession, part of lot 6 in said concession, the concession road between the 11th and 12th concessions of said township, part of lot No. 7 in said 11th concession to a point on the Grand Trunk Railway on said lot No. 7. (Application 7924. Case 3554.)

Application granted. Order issued.

1113. Application of H. Bingham and Joseph Quenneville, of the unincorporated village of Crysler, in the township of Finch, in the county of Stormont, Robert Stevens and Thomas Fleming, of the said township of Finch, and Louis A. Landry, of the township of Cambridge, in the county of Russell, for an Order directing the Ottawa and New York Railway Company to rebuild their railway station at the said unincorporated village of Crysler at a point on the northeast side of their railway line about 1,657 feet in a northeasterly direction from the site of their previous station. (Application 8699. Case 4077.)

Application withdrawn.

1114. Application of A. A. McFall, Bolton, Ontario, *re* proposed removal by the Canadian Pacific Railway of old main line and switches leading past his elevators near the old station at Bolton. (Application 2023.)

Settled. See order made in application 2023 *re* Bolton station.

1115. Application of St. Paul Land and Hydraulic Company, under the Railway Act, for an Order varying and defining Order of the Board dated October 4, 1906, upon the application of the Canadian Pacific Railway for a deviation of a portion of a branch line on the south side of the Lachine canal, province of Quebec. This application is set down to speak to the terms of the Order. (Application 1088. Case 1537.)

Application refused.

1116. Application of the Superior Copper Company, Limited, district of Algoma, Ontario, for an Order under section 227 of the Railway Act, granting leave to the applicants to join its railway line or track with those of the Algoma Central and Hudson Bay Railway Company. (Application 7904. Case 3623.)

Application struck off the list.

New application to be made.

1117. Application of the city of Ottawa, under section 250, for an Order permitting the applicant to permanently construct, maintain and operate an aqueduct for water works purposes through, along, upon and across the lands and under the railway of the Canadian Pacific Railway along a course composed of a part of lot 39, concession A, Ottawa front of the township of Nepean (now within the limits of the city of Ottawa.) (Application 8450. Case 3922.)

Application granted. Order issued. Reinforcing of the concrete to be acceptable to experts of railway company.

1118. Application of the Canadian Northern Ontario Railway under section 222 of the Railway Act, for authority to construct a branch line partly within the town of Hawkesbury and partly within the town of West Hawkesbury from its main line;

also under section 237 to make a junction of such branch line with the tracks of the Grand Trunk Railway at Riordan's mills, Hawkesbury. (Application 5570. Case 2219.)

The question to be considered is the switching rate to be charged on traffic transferred in connection with this junction and spur.

Order issued providing for interswitching rate.

1119. Application of the Grand Trunk Railway for an Order that as and from the 12th December, 1905, day and night watchmen be placed at the crossing of the Grand Trunk Railway by the Berlin and Waterloo Street Railway at King street, Berlin, Ontario, authorized by Order of the Railway Committee of the Privy Council, 1895, and that the Berlin and Waterloo Street Railway Company bear any increased cost of operating the protective appliances at the said crossing entailed by the carrying out of this Order beyond the cost of protection at the said crossing prior to the use of the crossing by the electric cars of the said Berlin and Waterloo Street Railway Company. (Application 113. Case 1252.)

Order 5661 rescinded. Berlin and Waterloo Railway to pay the Grand Trunk Railway 85 cents per day from November, 1905, to the 1st May, 1907, and the light commissioners of Berlin to pay the Grand Trunk Railway Company 90 cents per day from the 1st May, 1907.

1120. Application of the Canadian Pacific Railway, under section 178, for authority to take additional lands adjoining its railway in the township of Vaughan, county of York, Ont., the property of Mrs. Marion Long, for the convenient accommodation of the public and of the traffic of its railway, and to secure the efficient construction, maintenance and operation of the railway. (Application 8466. Case 3937).

Matter arranged by agreement between parties.

1121. Complaint of the town of Walkerton, Ontario, respecting alleged dangerous condition of the Walkerton and Lucknow Railway Company bridge over the Saugeen river about lot 71, north of Wellington street. (Application 6813.)

Order made subject to terms of an agreement between the railway company and the town till construction and maintenance of bridge be approved.

1122. Application of the Guelph and Goderich Railway Company, under section 237 of the Railway Act, for authority to lay its tracks across the road allowances on its Listowel branch through the townships of Wellesley, county of Waterloo, and the townships of Mornington and Elma, in the county of Perth, Ontario. (Application 7742. Case 3480.)

Application granted. Order issued, subject to various conditions set forth in the Order. Question of further protection reserved for further consideration of Board.

1123. Complaint of H. J. Gibney, J. J. Cain, and other residents of Alliston, Ontario, against the closing of Nelson, Wellington and Queen streets, in the said town, where such streets are intersected by the Canadian Pacific Railway. (Application 8181.)

Complaint dismissed.

1124. Application of George Elliott of Woodbridge, Ontario, under the Railway Act, for an order directing the Canadian Pacific Railway to protect his property from floodings, which is alleged to result from the construction of the Canadian Pacific Railway Bolton grade revision across the east half of lot 11, concession 8, township of Vaughan, Ontario. (Application 5760.)

Order issued in terms of consent minutes filed.

1125. Application of the Grand Trunk Railway under sections 222 and 237 of the Railway Act, for authority to construct, maintain, and operate certain branch lines of railway or sidings in the city of Hamilton, Ontario, and crossing certain roadways to the premises of the Hamilton and Toronto Sewer Pipe Company and the Fowlers Canadian Company. (Adjourned hearing.) (Application 7035. Case 3051.)

Application granted. Order issued.

1126. Complaint of the township of Foley of the alleged dangerous condition of the public road railway crossings of the Canadian Pacific Railway, Canadian Northern Ontario Railway, and Grand Trunk Railway Companies, in the township of Foley. (Application 8435.)

Order made for overhead bridge at Halplead Road, that approaches to Parry Sound Road Church Hill crossing Badgers crossing. Oastlers crossing comply with section 242 Railway Act; also approaches to Moore Road, Gaughs Road and Rat Portage Bay Road. Canadian Pacific Railway to complete work by June 1, 1909.

1127. Application of Andrew Oastler of James Bay Junction, Ontario, under sections 252-253 of the Railway Act, for an Order directing the Canadian Northern Ontario Railway to provide and construct four suitable culverts where the company's railway intersects his farm on lots 135 and 136 in the township of Foley, district of Parry Sound, Ontario. (Application 8422. Case 3993.)

Order issued on consent providing for two culverts to be built by railway company at its own expense by June 17, 1909.

1128. Application of Andrew Oastler, of James Bay Junction, Ontario, under sections 252 and 253 of the Railway Act, for an Order directing the Canadian Northern Ontario Railway to provide suitable farm undercrossing where the company's railway intersects his farm lot 135, concession 3, township of Foley, district of Parry Sound, Ontario. (Application 8529. Case 3984.)

Order made directing railway company to build a cattle pass at its own expense. Work to be done by June 17, 1909.

1129. Application of Andrew Oastler, of James Bay Junction, Ontario, under section 154 of the Railway Act, for an Order instructing the Canadian Northern Ontario Railway to provide and construct a suitable watering place where the company's railway intersects his farm in lot 134, concession 3, of the township of Foley, district of Parry Sound, Ontario. (Application 8552. Case 3994.)

Order made directing railway company to maintain fence so as to enable applicant's cattle to get to water. Work to be done by June 1, 1909.

1130. Complaint of the residents of the township of Sydenham and the town of Owen Sound, Ontario, respecting dangerous condition of highway crossing over the Canadian Pacific Railway near what is known as Murray's Cut. (Application 7449.)

Application dismissed with leave to applicant's to apply for installation of electric bell at said crossing.

1131. Application of the Canadian Pacific Railway, under section 229 of the Railway Act, for an Order amending Order dated July 29, 1908, authorizing the Grand Trunk Railway to cross the tracks of the Owen Sound section of the applicant company's railway, and the tracks of the Ontario and Quebec Railway Company at a point east of Weston road, in the town of Toronto Junction, Ontario. (Application 4564. Case 4002.)

1132. Application of the Grand Trunk Railway, under section 229 of the Railway Act, for an order directing the installation and maintenance at the expense of the Canadian Pacific Railway of a complete interlocking plant, with derails on the lines of both railway companies, the said derails to be interlocked with home and distant signals, at the point where the applicant company's railway is crossed on the level at Brampton, Ontario, by the Canadian Pacific Railway (formerly the Credit Valley Railway) in accordance with detail plans thereof to be submitted and approved by the engineer of the Board. (Application 8462. Case 3934.)

Application granted. Order issued placing cost on the junior road.

1133. Application of the Grand Trunk Railway, under section 229 of the Railway Act, for an Order directing the installation and maintenance at the expense of the Canadian Pacific Railway of a complete interlocking plant, with derails on the lines of both railway companies, the said derails to be interlocked with home and distant signals, at the point where the applicant's railway is crossed on the level

at Drumbo by the Canadian Pacific Railway (formerly the Credit Valley Railway) in accordance with detail plans thereof to be submitted and approved by the engineer of the Board. (Application 8461. Case 3933.)

Application granted. Order made placing the cost on junior road.

1134. Application of Mrs. H. A. McLeod, of Staney Brae, Ontario, under the Railway Act, for an Order directing the Canadian Northern Ontario Railway to provide a suitable farm crossing opposite her property. (Application 6708.)

Application granted. Order issued in terms agreed upon.

1135. Complaint of the council of the township of Somerville of failure on the part of the Grand Trunk Railway to provide and maintain a proper station at the centre line in the township of Somerville for the loading and unloading of traffic. (Application 7991.)

Stands—upon application by the township to be brought on upon 10 days' notice.

1136. Complaint of the Canadian Pacific Railway of failure of the Toronto Suburban Railway to instal a diamond at the crossing on St. Clair avenue, between Keele street and Western road, in the town of Toronto Junction, in accordance with requirements of Order of the Board No. 3130, dated May 3, 1907. (Application 2560. Case 252.)

Order made directing diamond to be installed immediately. Cost of installation to be borne by junior road.

1137. Complaint of the Grand Trunk Railway respecting position of certain poles, the property of the Toronto Electric Light Company, near the tracks of the railway company east of Scott street, in the city of Toronto, Ontario, being poles marked 'A,' 'B,' 'C' and 'D' on Grand Trunk Railway plan No. 9052, Toronto middle division. (Application 7809.)

Order made directing Toronto Electric Light Company to remove the poles within four months. Electric Light Company granted leave to apply to vary Order if within that time construction of viaduct is gone on with.

1138. Application of the Canadian Pacific Railway, under section 175 of the Railway Act, for leave to construct branch lines in the town of Parry Sound, as shown on plan filed with the Board. (Application 3098.)

Order issued in application No. 3939, Case 625, covers this also.

1139. *Re* speed of trains of the Grand Trunk Railway, Canadian Pacific Railway and the Canadian Northern Railway Companies crossing Bay and Yonge streets, in the city of Toronto, Ontario. (Application 4177. Case 844.)

Order made limiting speed of all trains on all railway crossings between Yonge and Bay streets to not more than 4 miles per hour between 7 a.m. and 12 p.m. from May 1 to October 15 in the terms of the statute requiring such limitations.

1140. Application of the city of Toronto, under sections 237 and 238 of the Railway Act, for an Order directing the Grand Trunk Railway to provide gates and watchmen at the crossing of Jameson avenue, in the said city, by the tracks of the railway. (Application 7442. Case 3247.)

Application granted. Order made for erection of gates and watchmen being placed. Cost to be divided equally between city and railway company.

1141. Application of the township of Wellesley, for an Order under sections 257 and 258 of the Railway Act, authorizing the Guelph and Goderich Railway Company to remove its water tank in connection with its station premises at Linwood to some point further away from the main line leading to Linwood, or that in the alternative an Order be made directing the Guelph and Goderich Railway to break cars so as to leave the said main road open when any train from the west is taking water from said tank. (Application 8438. Case 3914.)

Order made as in application No. 7742. Case 3480. If conditions not lived up to by railway company upon proof of breach by affidavit, Order will go for removal of tank.

1142. Application of J. S. Dignam of Toronto, under the Railway Act, for an Order directing the Bell Telephone Company to furnish him with a copy of their latest Official Telephone Directory for Western Canada and the United States. (Application 7539. Case 3285.)

Application dismissed.

1143. Application of F. W. Wegenast, Brampton, Ontario, under section 315, of the Railway Act, for an Order directing the Grand Trunk Railway to issue to him a 55 trip ticket for use between Brampton and Toronto, similar to those in use between Oakville and Toronto, at the same rate as those between Oakville and Toronto are sold, that is, $7.15. (Application 7287. Case 3378.)

Application dismissed.

1144. Application of the R. Laidlaw Lumber Company, Limited, Toronto, for an Order directing the Grand Trunk Railway to refund to the applicants certain switching charges collected by the company prior to September 1, 1908, the date on which the company's interswitching tariff No. C.R.C. 1380 became effective. (Application 4459. Case 1356.)

Application dismissed.

1145. Application of the Algoma Central and Hudson Bay Railway Company, for an Order under section 7, 317, 333, 334 and 338, for joint tariff with the Grand Trunk Railway. (Application 2232.)

Application dismissed.

1146. Application of the Boards of Trade of Galt, Preston, Hespeler, Waterloo and Berlin, under section 222 of the Railway Act, for an order directing the Grand Trunk Railway, the Canadian Pacific Railway, the Berlin, Waterloo, Wellesley and Lake Huron Railway Company and the Preston and Berlin Street Railway Company, to connect their lines of tracks in the towns of Galt, Treston, Hespeler, Waterloo and Berlin so as to admit of the safe and convenient transfer or passing of engines, cars or trains from the tracks or lines of one of the above railways to those of the other, and that such connections shall be maintained and used by the said Canadian Pacific Railway, Grand Trunk Railway, Berlin, Waterloo, Wellesley and Lake Huron Railway Company, and the Preston and Berlin Street Railway Company, respectively.

Also to determine by what company or companies, or other corporations or persons, and in what proportions the cost of making and maintaining any such traffic shall be thereby transferred from the line of one railway to those of another, or any other railway or railways that might hereafter enter the said towns of Galt, Preston, Hespeler, Berlin and Waterloo. (Adjourned hearing.) (Applications 1761, case 2391; 1758, 2392; 1763, 2393; 1762, 2394.)

Application dismissed so far as connection with electric roads is asked, upon want of jurisdiction. Cost of connection between Grand Trunk Railway and Canadian Pacific Railway to be paid by Canadian Pacific Railway.

1147. Application of the Commercial Acetylene Company and the Canadian Northern Railway Company) for an Order approving of the lighting of cars of the railway company with commercial acetylene gas. (Application 4739. Case 2395.)

Order made permitting the use of acetylene gas under what is known as the Absorbent or Commercial Acetylene System.

1148. Application of the Crow's Nest Pass Coal Company, Limited, for an Order requiring the Canadian Pacific Railway Company to provide a special tariff of tolls to be charged by the railway company to the Coal Company under the provisions of the agreement between the British Columbia Southern Railway Company, the Canadian Pacific Railway Company, and the Kootenay Coal Company (now the Crow's Nest Pass Coal Company) bearing date July 30, 1907. (Application 8398. Case 3880.)

Application refused.

1149. Application of the Grand Trunk Railway under section 176, for an Order to fix the compensation to be paid to the Grand Trunk Railway Company by the Guelph and Goderich Railway Company, for the use made of the lands and property

of the Grand Trunk Railway at the town of Goderich, as provided in Order No. 4002, dated October 30, 1907, and which said Order authorized the Guelph and Goderich Railway Company to use and occupy the lands and premises of the Grand Trunk Railway for the construction of a bridge or grain carrier over the tracks of the Grand Trunk Railway in the said town of Goderich, Ontario. (Application 4733. Case 4067.)

1150. Application of the Niagara, St. Catharines and Toronto Railway Company, under section 246 of the Railway Act, for authority to cross with its tracks and wires the wires of the Hamilton Cataract Power, Light and Transmission Company, at station 247, -01 and station 282-94, main line and station 280 T. H. & B. connection, lot 27, concession 5 and 6, township of Crowland, county of Welland, Ontario. (Application 8777. Case 4126.)

Application granted. Order issued.

1151. Application of the Niagara, St. Catharines and Toronto Railway Cmpany, under section 227, for authority to connect its tracks with the tracks of the Toronto, Hamilton and Buffalo Railway Company, in lot 27, concession 6, township of Crowland, county of Welland, Ontario. (Application 8838. Case 4176.)

Application granted. Order issued.

1152. Application of the Niagara, St. Catharines and Toronto Railway Company, under section 178, for authority to take part of lot 27, concession 6, township of Crowland, county of Welland, Ontario, the property of W. H. Singer, for the purpose of securing the efficient operation of its railway. (Application 8837. Case 4175.)

Application withdrawn.

1153. Application of Cameron & Company, of Ottawa, Ontario, under sections 226 and 234 of the Railway Act, for an Order directing the Grand Trunk Railway to provide and construct a line of railway making connection between the private siding or branch line of the applicants with the main line of the Grand Trunk Railway, Atlantic Division, at or near Aylen Lake station, Ontario. (Application 8768. Case 4121.)

Stands adjourned, parties to settle. Settlement subsequently made.

1154. Complaint of Henri Frenette, of Portneuf, P. Q., of failure of the C.P.R. and the National Transcontinental Railway to provide proper drainage on right of way through his farm in the village of Portneuf, province of Quebec. (Application 8613.)

Stands. Refered to Board's engineer to report.

1155. Application of the Grand Trunk Railway, under sections 222 and 237, for leave to construct, maintain, and operate two branch lines of railway or spurs, from a point on the applicant company's railway on Bethune street in the city of Peterborough.

One crossing Bethune street to lot No. 9, north of Dalhousie street, and No. 2 crossing Bethune street to lot No. 9, north of Wolfe street, in the said city of Peterborough, Ontario. (Application 6492. Case 2737.)

Revision of order No. 5132. Order No. 5132 stands and application city of Peterborough to revise same dismissed.

1156. Application of the Grand Trunk Railway, under section 50, for an Order extending the time for the construction of the branch line and station authorized to be constructed between the Grand Trunk Railway's main line, east of the Port Hope viaduct, and a point on the Northern Division, north of Ontario street, Port Hope, Ontario, by Order of the Board, No. 2333, dated 16th December, 1906, for a period of two years from the 18th day of December, 1908. (Application 3675. Case 411.)

Application dismissed.

1157. Complaint of Amos Morgan, Crookston, Ontario, that in the construction of the Havelock section of the Canadian Pacific Railway at mileage 89·9, the railway company damaged his property situate on lot 1, concession 9, on the town line between

Rawdon and Huntingdon, near Crookston, Ontario, by diverting the watercourse as it then existed along the right of way at or near station 31-48. (Application 7634.)

Order made directing railway company to clean ditches and deepen off-take ditch through complainant's land, work to be completed by 1st May, 1909.

1158. Complaint of the Honourable Senator Tessier of refusal by the Ottawa Electric Railway Company to furnish free transportation to him as a member of the Senate of Canada over its lines of railway. (Adjourned hearing.)

Complaint withdrawn.

1159. Complaints of residents of the township of Montcalm, province of Quebec, against the train service and condition of the Montford Branch of the Canadian Northern Quebec Railway Company. (Application 7063.)

Order made directing the railway company to put the branch line in order by ballasting the track, &c. Also to provide suitable platform by April 30, 1909. Also to supply baggage cars and suitable passenger cars. Also appoint a permanent agent at Montfort. The company to be liable to a penalty not exceeding $50 for every day on which any violation of the provisions of this Order occur.

1160. Application of Thomas Crockett, shipper of lumber, shingles and ties, of Rivière du Loup station, province of Quebec, for an order to compel the Intercolonial Railway and its connecting companies to conform to the tolls section of the Railway Act and the previous orders of the Board relative to the carriage of cedar railway ties; referring more particularly to shipments from Rivière du Loup station to Bennington, Vermont. (Application 6836.)

Board after hearing application decided that it could exercise no measure of control which would in any way benefit the complainants and made no Order.

1161. Application of the Commercial Acetylene Company of New York, *re* classification for transportation by express companies in Canada subject to the Board, of acetylene gas when shipped under the so-called safety storage system? (Application 8801. Case 4146.)

Order made that express companies operating in Canada and under the jurisdiction of the Board are directed to accept and carry acetylene gas under the rules and regulations prescribed in connection therewith in the official classification No. 18, and at the rating therein provided. Also that a supplement be issued to express classification No. 16 as now in effect to provide for the said change becoming effective not later than May 1, 1909. Subsequently rescinded on ground of want to jurisdiction. Judgment will appear in next annual report.

1163. Complaint of the Transportation Bureau of the Montreal Board of Trade against stop-over charge made by the Canadian Pacific Railway Company at Cartier, Ontario, on western grain consigned to Cartier for Order and reshipment. (Application 8641.)

Order made that the charge of one cent per 100 pounds imposed by the Canadian Pacific Railway at Cartier on western grain and grain products in carloads consigned to Cartier for Orders under supplement No. 13, and by the Grand Trunk Railway at Sarnia tunnel on grain and grain products in carloads originating in western Canada destined to points in eastern Canada routed via Chicago, Chicago Junction or Milwaukee to Sarnia tunnel, Ontario, for orders under supplement No. 3, to the Canadian tariff C. R. C. No. 1-E-II-0-I, be disallowed and the stop-over charge of 25 cents per car for the first forty-eight hours and the car service toll thereafter substituted therefor. Order to become effective not later than February 15, 1909.

1164. Complaint of the Board of Trade of Guernsey, Saskatchewan, that the Canadian Pacific Railway Company's rate on grain to Fort William for re-shipment to points east, discriminates against Guernsey in favour of other shipping points in the same territory. (Application 8525.)

Complaint dismissed.

1165. Complaint of Robert Train, Nashville, Ontario, that the Canadian Pacific Railway Company have closed a highway or road allowance in the ninth concession of

the township of Vaughan, being allowance for road between lots 25 and 26, 9th concession, township of Vaughan. (Application 8769.)

Complaint struck off the list, Board held it had no jurisdiction to award damages.

1166. Application of the Peters Coal Company, under section 226, for an order directing the Canadian Pacific Railway Company, to construct, maintain and operate a suitable switch and branch line or spur from the company's railway into the applicant's coal yard, situate on the north east corner of Elizabeth and Maria streets in the city of West Toronto and known as lots 1, 2, 3, 4 and 5, on the north side of Maria street, plan 740. (Application 8839. Case 4177.)

Application granted. Railway company to construct branch line by February 8, 1909. Applicants to deposit $500 in some chartered bank to defray costs of construction.

1167. Application of the Grand Trunk Railway, under section 50, for an Order extending the time for the construction of the branch line and station authorized to be constructed between the Grand Trunk Railway's main line east of the Port Hope viaduct, and a point on the northern division, north of Ontario street, Port Hope, Ontario, by order of the Board No. 2333, dated December 16, 1906, for a period of two years from December 18, 1908. (Application 3675. Case 411.)

Application refused.

1168. Application of the Grand Trunk Railway Company, under section 29 of the Railway Act, for an Order varying Order of the Board No. 2757, dated March 27, 1907, by extending the time for the construction of the branch line until December 31, 1910, from a point on the Grand Trunk Railway between Orillia and Midland, near Tiffin, and running in a southerly direction through the townships of Tiny and Tay to the road allowance between lots 91 and 92, 2nd concession, township of Tiny, and across public highways. (Application 3686. Case 419.)

Application refused.

1169. Application of the Grand Trunk Railway Company under section 29 of the Railway Act, for Order varying Order of the Board No. 2757, dated March 27, 1907, which authorized the construction of a branch line from a point on its line of railway between Colwell and Penetanguishene, near Wyevale, in the township of Tiny, county of Simcoe, province of Ontario, running in a northerly direction to the road allowance between lots Nos. 91 and 92, concession 2, township of Tiny, by extending the time for the construction of the branch line until December 31, 1910. (Application 3686. Case 421.)

Application refused.

1170. Application of the Grand Trunk Railway Company, under section 288 of the Railway Act, for Order allowing that company to leave out the filling and packing mentioned in section 288 of the Railway Act, from the month of December to the month of April in each year, both months inclusive. (Application 505.)

Application refused; Order made rescinding Order No. 836, dated 22nd December, 1905.

1171. Application of the city of Toronto for an Order, under sections 29 and 32 of the Railway Act, varying order of the Railway Committee of the Privy Council dated 11th March, 1902, respecting the protection of Dowling and Dunn avenues, Toronto, by the Grand Trunk Railway, by directing that the railway company bear the whole or part of the costs of the protection directed by said Order. (Application 14. Case 4254.)

Application refused.

1172. Complaint of W. D. Woodruff, of St. Catharines, Ontario, of failure of the Grand Trunk Railway Company to provide sufficient station and siding facilities near Vineland, between Beamsville and Jordan, for the handling of traffic for the Ontario Experiment Fruit Farm. (Application 8644. Case 4045.)

Complaint withdrawn.

1173. Application of the council of the town of Listowel, Ont., for an Order compelling the Grand Trunk Railway Company and the Canadian Pacific Railway Company to make interswitching arrangements with each other so that the manufacturers will get the benefit of the service of both roads in Listowel, Ontario. (Application 8453. Case 3927.)

Application refused.

1174. Complaint of Hiram Walker & Sons, Limited, of Walkerville, Ontario, with respect to rates charged on joint traffic originating at Canadian Pacific Railway and Pere Marquette Railway points and destined to Walkerville, Ontario. (Application 4459. Case 4219.)

This case involves consideration of interswitching.

Order made fixing rates on grain shipped to Walkerville, Ontario, in carloads from the following places in Ontario: Elmstead, 3½c per 100 lbs.; Bell River, 3½c per 100 lbs.; St. Joachim, 4c per 100 lbs.; Haycroft, 4¾c per 100 lbs.; Tilbury, 4¾c per 100 lbs. Minimum weight 40,000 lbs. per car. Switching charges apportioned.

1175. Application of the Quebec, Montreal & Southern Railway Company for an Order directing the Rutland Railroad Company to change its existing derails at or near the junction point of its line with that of the Quebec, Montreal & Southern Railway and the Grand Trunk Railway at Noyan Junction. (Application 5482. Case 2104.)

(This application is set down for the purpose of settling the disposition of the cost of change of derails.)

Application granted; Order made directing applicants to pay expense of making the change.

1176. Application of Moise Francœur, parish of St. Jerome, county of Terrebonne, province of Quebec, for an Order directing the Canadian Northern Quebec Railway Company to provide a suitable farm crossing where the right of way of the company affects his property. (File 5932.)

Application granted; order made for crossing on southerly lot.

1176. Application of the town of Lachine, province of Quebec, for an Order directing the Grand Trunk Railway and Montreal Park and Island Railway to open Second avenue, in the town of Lachine, across the tracks of the railway companies. (File 8448. Case 3921.)

Application to stand. Town Lachine to have permission to widen the posts to get snow plough through. Grand Trunk Railway Company not to close the gates.

1178. Application of the Montreal Terminal Railway Company for an order authorizing the applicant to cross the Canadian Northern Quebec Railway opposite the Vulcan Cement Company's works in the parish of Longue Pointe, province of Quebec. (File 8915. Case 4225.)

Application granted. Order made for construction of spur as shown on plan.

1179. Petition of the trustees of Prince Albert school ward, Montreal, and others, for an Order requiring the Grand Trunk Railway to provide proper protection where its railway crosses Rose de Lima street, between St. James and Notre Dame streets, adjacent to the St. Henri depot. (File 7843.)

Order made directing the railway company to provide gates by April 15, 1909, and maintain the same. The city of Montreal to pay one-half the cost of protection, maintenance and operation.

1180. Complaint of Madame Plouffe, of failure of the Canadian Northern Quebec Railway to provide and construct a proper farm crossing between bents 2 and 3 of the trestle on her farm, mile 15, St. Jerome, St. Sauveur branch. (File 5718.)

Settled on report from the Board's engineer.

1181. Application of the Canadian Pacific Railway, for authority to construct, maintain and operate a branch line or spur in Montreal, across De Levis street to the premises of the Montreal Gas Company, now leased to the Montreal Light, Heat

and Power Company, situate on cadastral, lot 159, Hochelaga ward, Montreal, a distance of about 1,780 feet, together with another siding about 550 feet in length. (File 8152. Case 3708.)

Application granted. Order issued.

1182. Application of McDiarmid & Gall, Montreal, province of Quebec, for an Order directing the railways to make an allowance of 72 hours for the unloading of charcoal in carloads instead of 48 hours allowed by the rules of the Canadian Car Service Bureau. (Application 7905.)

Order made refusing the application.

1183. Complaint of Rev. J. B. Grenier, St. Tite, province of Quebec, respecting alleged inefficiency of the train service of the Canadian Northern Quebec Railway between Quebec and Montreal; also station accommodation at Heronville, Garneau and St. Tite, province of Quebec. (File 8304.)

Upon the railway company undertaking to comply with the recommendations made by the Board's engineeer in report, October 31, 1908, application adjourned till July sittings of Board, 1909.

1184. Complaint of the residents of the town of Sorel, province of Quebec, of the unsatisfactory manner in which the passenger and freight services are performed by the Quebec, Montreal and Southern Railway, and of the condition of the railway and station accommodation at Sorel and Pierreville, province of Quebec. (File 7628.)

Order made fixing location for new stations at Sorel and Pierreville.

1185. Complaint of Hyde & Webster, Montreal, province of Quebec, against the Canadian Pacific Railway prohibition of joint use of their private siding at Outremont, province of Quebec, by themselves and private parties. (File 8850.)

Matter adjusted by parties at the hearing. No Order issued.

1186. Complaint of the Montreal Produce Merchants' Association, Montreal, province of Quebec,—

(1) Respecting the disadvantage under which Montreal shippers are placed as compared with through shippers in the west in the matter of rates on cheese.

(2) Respecting the placing of cheese on a parity with bacon in the matter of freight rates.

(3) The great advance in freight rates which has taken place in the last few years. (File 5698.)

Stands for judgment. Chief Traffic Officer of Board to report.

1187. Application of the transportation bureau of the Montreal Board of Trade for an Order directing the Canadian Pacific Railway to apply the same mileage rates on grain in carloads between points on the company's line east of and including Montreal, province of Quebec, as are applied by the company between its stations in Ontario, west of Montreal, province of Quebec. (File 8730.)

Stands for judgment.

1188. Application of the St. Lawrence and Adirondack Railway Company for approval of highway crossings in the counties of Huntingdon, Beauharnois, Chateauguay and La Prairie, in the province of Quebec. (Application 8359. Case 3850.)

Application granted and Order issued subject to usual conditions of Board respecting highway crossings by railways.

1189. Approval of tariffs of tolls of express companies pursuant to the provisions of section 348 of the Railway Act. (File 4214. Case 1503.)

Unfinished. Further evidence to be taken.

1190. Complaint of the Sanataris Limited of Arnprior, Ontario, that under the new express classification for Canada effective January 1, 1909, return of empties, which have hitherto been carried free of charge are to be charged one-half the merchandise rate. (Application 9192.)

Judgment reserved. To be occasioned with general express matters.

1192. Application of the township of the front of Escott, in the county of Leeds, province of Ontario, under sections 235 to 242, inclusive, of the Railway Act, for an

Order directing the Grand Trunk Railway Company of Canada, to provide and construct, immediately, to the east of the present crossing, a suitable overhead crossing, where the company's railway intersects at different level crossings, two and a half miles west of Mallorytown station the main travelled highway running from the village of Rockfield, in the township of Front of Escott, in a southerly direction to the village of Escott, P.Q. (Adjourned hearing.) (Application 4452. Case 1118.)

Application dismissed, leave to revive if applicant desire.

1193. Application of the Grand Trunk Railway Company of Canada, under sections 222 and 237 of the Railway Act for leave to construct, maintain and operate two branch lines of railway or spurs, from a point on the applicant company's railway on Bethune street in the city of Peterborough:—

One crossing Bethune street to lot No. 9, north of Dalhousie street and No. 2 crossing Bethune street to lot No. 9, north of Wolfe street, in the said city of Peterborough, Ontario.

To consider revision of order No. 5132. (Application 6492. Case 2737.)

Application dismissed.

1194. Application of the Grand Trunk Railway Company of Canada, under section 176 of the Railway Act, for an Order to fix the compensation to be paid to the Grand Trunk Railway of Canada, by the Guelph and Goderich Railway Company for the use made of the lands and property of the Grand Trunk Railway at the town of Goderich, as provided in Order No. 4002, dated October 30, 1907, and which said Order authorized the Guelph and Goderich Railway Company to use and occupy the lands and premises of the Grand Trunk Railway for the construction of a bridge or grain carrier over the tracks of the Grand Trunk Railway Company of Canada in the said town of Goderich, Ontario. (Adjourned hearing.) Application 4733. Case 4067.)

Settled betewen parties.

1195. Application for approval of location of the Udney and Orillia branch from Mile 'O' at Udney, township of Mara to Mile '5·25' in same township, and for authority to cross several existing highways. (Application 8487. Case 3913.)

Settled by parties.

1196. Application of the municipality of Maxville, county of Glengarry, Ontario, under section 237 of the Railway Act, for an Order to compel the Grand Trunk Railway Company of Canada to open for traffic a highway across their railway at a point shown on plan filed with the Board marked 'A.' (Application 8316. Case 3824.)

Application granted. Order issued.

1197. Application of the corporation of the town of Oshawa, Ontario, under section 237, for an Order sanctioning the constructoin of a highway across the line of the Oshawa Railway Company at First avenue, Oshawa, Ontario. (Application 8820. Case 4159.)

Application granted. Order issued on consent.

1198. Application of the corporation of the town of Oshawa, under section 237, for an Order sanctioning a highway crossing across the right of way of the Oshawa Railway Company at Barry avenue, Ontario. (Application 8821. Case 4160.)

Application granted. Order issued on consent.

1199. Application of the Commissioners of the Transcontinental Railway, under section 227 of the Railway Act, for an Order granting leave to the applicants to cross the railway line and tracks of the Temiscouata Railway Company by a level crossing at a point about 19·2 miles on the Transcontinental Railway line, measured westerly from the town of Edmundston, in the county of Madawaska, N.B., or 46·62 miles from a point 2½ miles west of the town of Grand Falls. (Application 8830. Case 4168.)

Application granted. Order issued on consent.

1200. Application of the Canadian Pacific Railway Company as lessee and exercising the franchise of the Toronto, Grey and Bruce Railway Company for an Order, under section 237 of the Railway Act, granting it authority to divert the present highway where it crosses its railway at Kleinburg in the township of Vaughan, county of York, Ontario. (Application 9054. Case 4322.)

Application dismissed.

1201. Petition of the trustees of Prince Albert school ward, Montreal, and others, for an Order requiring the Grand Trunk Railway Company to provide proper protection where its railway crosses Rose de Lima street, between St. James and Notre Dame streets, adjacent to the St. Henri depot. (Application 7843.)

Order issued directing railway company to erect and maintain gates on or before April 15, 1909, city to pay one-half cost of erection and maintenance and not to be liable for accidents at crossing.

1202. Application of the Toronto and Niagara Power Company, under section 159, for approval of location of its line from its transformer house in the county of Welland at Niagara Falls, through township of Stamford to the right of way of Niagara, St. Catharines and Toronto Railway near Wrights crossing in the vicinity of the town of Niagara Falls, Ontario. (Application 450. Case 3945.)

Application granted. Order issued.

1203. Application of the Commissioners of the Transcontinental Railway, under section 237 of the Railway Act, for an Order granting leave to the applicants to construct a level crossing for the railway line of the National Transcontinental Railway over the public highway running along the St. John river between Edmundston and Connors in the county of Madawaska and province of New Brunswick at a point on said railway about 46·52 miles measured westwardly from a point 2½ miles west of the town of Grand Falls, and also to permanently divert such highway and construct another highway in lieu thereof. (Application 8830. Case 4178.)

Application granted. Order issued.

1204. Application of the Toronto Electric Light Company, Limited, under section 246 of the Railway Act, for leave to install and maintain their line of twelve underground tile ducts under and across the tracks of the Grand Trunk and Canadian Pacific Railway Companies, where the same cross Bloor street in the northwest part of the city of Toronto, Ontario. (Application 8872. Case 4193.)

Application granted. Order issued.

1205. Complaint of the Brotherhood of Railroad Trainmen alleging dangerous position of switches, switch-stands, bridge supports and structures generally by being placed so near to the tracks on which the employees of the Canadian Pacific Railway have to work at Kenora and Keewatin yards, Ontario. (Application 8891. Case 4208.)

Stands for report of Board's engineer.

1206. Application of Christie, Henderson & Co., Ltd., of the city of Toronto, county of York, Ontario, under section 226 of the Railway Act, for an order directing the Grand Trunk Railway Company to construct, maintain and operate a spur or branch line from the quarries of the applicants to the branch line of the said railway company between Harrisburg and Guelph, and to connect therewith at a point about two and a half miles northeasterly from the town of Hespeler.

And for payment by the said railway company of the costs and expenses incurred by the applicants of and incidental to this application; the railway company having unreasonably refused to construct the said spur at the point necessary for the industry of the applicants, upon any terms whatever. (Application 9171. Case 4391.)

Application granted. Order issued.

1207. Complaint of R. Finer and B. Daniels, of Longueuil, province of Quebec, against the train service of the Quebec, Montreal and Southern Railway Company between St. Lambert and Longueuil, province of Quebec. (Application 9193.)

Stands pending carrying out of proposed agreement between Quebec, Maine and Southern Railway and Grand Trunk Railway.

1208. Consideration of draft Order of the Board in connection with equipment of non-platform cars with proper operating levers, dispensing with the operating wheel at present in use on the ends of such cars. (Application 9000. Case 4294.)

Application granted. Order issued.

1209. Consideration by the Board of the question of providing better protection of wooden trestles and bridges on lines of railway subject to the jurisdiction of the Board. (Application 4966. Case 1860.)

Stands adjourned to June sittings, 1909.

1210. Application of the Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company, in pursuance of paragraph 6 of Order of the Board, dated 23rd of February, 1905, for an order fixing the compensation to be paid by the Canadian Northern Railway Company (formerly the James Bay Railway Company) for the use of the Union station property at Toronto, including the service and accommodation provided, and at present and for some time past used and enjoyed by the Canadian Northern Ontario (formerly James Bay Railway Company). (Adjourned hearing.) (Application 588. Case 3208.)

Order made directing Canadian Northern Railway to pay to this date on basis of present agreement, future payments to be agreed upon or settled by the Board.

1211. *Re* Toronto Viaduct and Union station; settlement of terms of draft Order herein. (Application 588. Case 3322.)

Stands, railway companies agreeing to file plans within three months. Details of Order to stand for settlement.

1212. Application of the Bay of Quinté Railway Company for an Order, under section 364 of the Railway Act, and under any other section applicable to the circumstances of the case ascertaining and settling the compensation payable by the applicant to the Kingston and Pembroke Railway Company, in respect to the running rights possessed by the applicant over the Kingston and Pembroke Railway Company's railway from Harrowsmith to Kingston, Ontario. (Application 8886. Case 4201.)

Application dismissed. No jurisdicton.

1213. Application of Messrs. McDonald & O'Brien, Hervey Junction, province of Quebec, under the Railway Act, for an order providing for joint freight traffic from points on the Canadian Northern Quebec Railway to points on the Quebec and Lake St. John Railway. (Applicaton 8472.)

Order made fixing the minimum charge of $5 per car in a through shipment of new empty cars over two or more lines of railway. The Canadian Northern Railway Company to submit at once a joint tariff for shipment of new empty cars over the Canadian Northern Quebec Railway lines and the Quebec and Lake St. John line. The Canadian Freight Association to submit at once an amendment to Canadian classification providing for lower minimum charge to apply to new empty cars by joint route of two or more lines of railway.

1213a. Complaint of Hyde & Webster, contractors, Montreal, P.Q., that the Grand Trunk Railway charges 6c. per 100 pounds on bricks C. L. Casselman to Montreal, Canadian Pacific Railway delivery via Jacques Cartier Junction. (Application 9116.)

Order made dismissing application.

1214. Complaint of S. G. Detchon, of Chicago, Ill., that the Grand Trunk Railway has refused to pay its proportion of alleged overcharge on shipment of frosted wheat from Girvin, Sask., on the Canadian Northern Railway, between Regina and Saskatoon, during December and January, 1907 and 1908, the other companies interested, namely, the Canadian Northern Railway and the Canadian Pacific Railway, being prepared to settle. (Application No. 7097.)

Settled; payment made by Canadian Northern Railway.

1215. Application of James Richardson & Sons, Kingston, Ontario, under the Railway Act, for an order directing the railway companies to file rates from Kingston to points in the maritime provinces on grain ex-upper lake ports, similar to those which the Grand Trunk and Canadian Pacific Railways have established from Georgian bay and Lake Huron ports. (Application 8315.)

Ordered that the rates charged from Kingston by the Grand Trunk Railway Company of Canada, the Canadian Pacific Railway Company and the Kingston and Pembroke Railway Company, on western grain arriving at Kingston by vessel and destined to points in Quebec and the maritime provinces, be made on the basis of 7 cents per 100 pounds from Kingston to Montreal; and that the proportional or 'arbitrary' rates from Montreal to the said points in Quebec and the maritime provinces, to be added to the said rate of 7 cents per 100 pounds from Kingston to Montreal, do not exceed the proportional or 'arbitrary' rates from Montreal in force concurrently on western grain transferred at Lake Huron ports.

Also that the above rate become effective not later than the 16th of February, 1909.

1216. Complaint of J. B. Stringer & Co., of Chatham, Ontario, alleging discrimination against Chatham in the freight rates of the Canadian Pacific Railway on corn as compared with rates from other points. (Application 9114.)

Order made dismissing complaint.

1217. Application of the Canadian Freight Association, under Order of the Board No. 3258, dated July 6, 1907, for an order cancelling or reviving the existing commodity rates on wire fencing and netting from Windsor, Stratford, Owen Sound, Hamilton and Welland, Ontario. (Application 7346. Case 3210.)

Application granted except that carload commodity rates from Hamilton, Windsor and Walkerville, Ontario, to points east of Toronto are scaled as set forth in the Order. These rates to take effect not later than the 26th April, 1909.

1218. Complaint of the Dominion Millers' Association, Toronto, Ontario, under section 317 of the Railway Act, alleging that the Canadian Pacific Railway Company has unjustly discriminated and does unjustly discriminate in its method of dealing with shipments of grain and flour from Fort William and Owen Sound, Ontario, against the millers of the east and in favour of shipments of grain and flour as aforesaid for export. (Application No. 4752. Case 1455.)

Application withdrawn.

1219. Approval of tariffs of tolls of express companies pursuant to the provisions of section 348 of the Railway Act. (Application 4214. Case 1503.)

Partially heard.

1220. Application of the Express Traffic Association for an order permitting them to file for approval, express freight classification, graduated rate tables, money classification, C.R.C. Nos. 1, 2, 3 for Canadian business; and to withdraw Canadian classification and money classification, C.R.C. Nos. 1 and 3, filed on March 1, 1907. (Application 4397. Case 3693.)

Partially heard.

1221. Application of the Canadian Pacific Railway Company, under section 59 of the Railway Act, for an Order directing re-apportionment of the cost of maintaining day and night watchmen at the point where the applicant company's railway crosses Main street in the village of Fairville, N.B.

Order made directing each of the parties to pay one-third of cost.

1222. Complaint of W. F. Hatheway Company, Ltd., Geo. E. Barbour Co., Ltd., Hall & Fairweather, Ltd., C. H. Peters & Sons and A. C. Smith & Co., *re* rates on exportation of our from city of St. John to different water points.

Application dismissed.

1223. Complaint of the St. John, N.B., Board of Trade, on behalf of its members, that the C. P. R. Co. is charging 50 cents per short ton shunting charges on goods from steamships at West St. John to his factory, a distance of 4¾ miles.

Application dismissed.

1224. Complaint of the St. John Board of Trade regarding increased rate over the Dominion Atlantic Railway steamship route between St. John and Digby.

Application dismissed.

1225. Complaint of Irwing R. Todd, St. Stephens, N.B., against the Canadian Pacific Railway Company regarding rates on pulpwood.

Application dismissed.

1226. Complaint of the Maritime Cornmeal Mills (C. W. Stewart) respecting export milling rates on meal).

Stands for judgment. Chief traffic officer to report.

1227. Complaint of Horace Haszard, Charlottetown, P.E.I., *re* express rates and service of Canadian Express Company (file 4621.)

Stands to be dealt with when general question of express rates is disposed of.

1228. Complaint of H. E. Baker Company, Limited, Sydney, C.B., *re* express rates on lobsters, charged by Canadian Express and other express companies. (File 3872.)

Stands to be dealt with when general question of express rates is disposed of.

1229. Complaint of Thomas Potts, St. John, N.B., *re* express rates on fruit from Niagara district, Ontario. (File 5028.)

Stands to be dealt with when general question of express rates is disposed of.

1230. Complaint of North Queens' Board of Trade, Caledonia, Nova Scotia, *re* express rates charged by the Maritime Express Company. (File 3924.)

Stands to be dealt with when general question of express rates is disposed of.

1231. Complaint of A. M. Fraser, Halifax, Nova Scotia, *re* express rates on typewriters from Woodstock, N.B., to Halifax, Nova Scotia, charged by Dominion Express Company; and *re* complaint of Soulis Newsome Typewriter Company, Halifax, Nova Scotia, as to express rates on unboxed typewriters. (File 3274.)

Stands to be dealt with when general question of express rates is disposed of.

1232. Complaint of John Hopkins in *re* express charges of the Dominion Express Company. (File 3280.)

Judgment reserved.

1233. Complaint of Sackville Board of Trade, N.B., in *re* express rates. (File 4566.)

Stands to be dealt with when general question of express rates is disposed of.

1234. Complaint of Messrs. Davis & Fraser, Halifax, N.S., *re* express rates from Charlottetown, P.E.I., to points in New Brunswick and Nova Scotia. (File 6360.)

Judgment reserved.

1235. Application of George Frederick Stiles under sections 252 and 253 of the Railway Act, for an order directing the Canadian Pacific Railway Company to provide and construct a suitable farm crossing where the railway company's right of way affects the property of the applicant on lot No. 19, concession No. 2, in the township of London. (Application 5481. Case 4056.)

Application refused.

1236. Application of the Canadian Pacific Railway Company, under section 186 of the Railway Act, 1903, for leave to cross with its Sudbury-Kleinburg branch, certain highways in the town of Vespra, in the county of Simcoe, Ontario. (Application 3911. Case 605.)

Application granted. Order issued in terms of agreement filed.

1237. Application of the Canadian Pacific Railway Company, as lessee and exercising the franchise of the Toronto, Grey and Bruce Railway Company, for an Order, under section 237 of the Railway Act, granting it authority to divert the present high-

way where it crosses its railway at Kleinburg, in the township of Vaughan, county of York, Ontario. (Application 9054. Case 4322. Adjourned hearing.)

Application dismissed.

1238. Application of the Crawshaw Bros., of Scotch Block, Ontario, for an Order under the Railway Act, directing the Grand Trunk Railway Company to provide a siding for the handling of traffic to and from their quarry, or to restore the old 'Lawson siding' for this purpose. (Application 8963. Case 4259.)

Application refused.

1239. Application of the corporation of the city of Hamilton for an Order, under the Railway Act, directing the Toronto, Hamilton and Buffalo Railway Company and the Canadian Pacific Railway Company to provide and construct a suitable highway bridge over the tracks of the company at the intersection of the line of the company at Garth street in the city of Hamilton. (Adjourned hearing.) (Application 1592. Case 2739.)

Application granted. Order for wooden bridge, cost to be borne ¼ by city and ¾ by railway company. Plans to be submitted for approval of Board.

1240. Application of the Canadian Pacific Railway Company, under section 175 of the Railway Act, 1903, for leave to construct branch lines in the town of Parry Sound, as shown on the plan filed with the Board.

NOTE.—The above application to be considered in connection with an application of the company under date of the 6th of January, 1909, withdrawing from the above application all the portion thereof relating to lines south of Seguin river and east of Seguin street, so that only one branch is to be built north of the Seguin river terminating at or near the west side of Seguin street.

In conjunction with the above application will be considered the application of the Canadian Northern Railway Company, under section 175 of the Railway Act, 1903, for authority to construct, maintain and operate a branch line from its main line in the town of Parry Sound to the outer harbour, as shown on the plan, profile and book of reference on file with the Board under file 3939, case 625a.

Covered by Order issued in application 3939 of Canadian Northern Railway.

1241. Complaint of F. B. Stevens & Co., of Chatham, Ont., alleging discrimination against Chatham in the freight rates of railways on corn as compared with rates to other points. (Application 9195.)

Application dismissed.

1242. Application of the Canadian Pacific Railway Company for an Order, under section 29 of the Railway Act, rescinding order of the Board dated July 25, 1905, fixing the rate to be charged for the interchange of traffic and interswitching of cars over the branch line of the Grand Trunk Railway Company connecting with the Canadian Pacific Railway Company at London, Ontario. (Adjourned hearing.) (Application 689. Case 4055.)

Stands for judgment.

1243. Application of the Wallaceburg Sugar Company, Ltd., of Wallaceburg, Ontario, for an Order establishing what is generally known as an 'average' demurrage plan. (Adjourned hearing.) (Application 8913. Case 4223.)

Application dismissed.

1244. Complaint of Alfred Swanson, Brookdale, Man., that the Canadian Pacific Railway have not paid him for land taken by the railway for the construction of its McGregor-Varco branch, being part of the north half of 32-12-16, and the south-east quarter of 6-13-16 W. (Application 8852.)

Referred to Board's engineer to inspect and report in spring as to the accumulation of water upon the lands of the applicant caused by the construction of the railway.

1245. Petition of the residents of Sinclair, Manitoba, that the Canadian Pacific Railway Company be directed to provide a side track halfway between Reston and

Sinclair, Manitoba, for the accommodation of traffic of the district. (Application 8853.)

Application refused.

1246. Complaint of Mrs. J. E. Collins of failure of the Canadian Northern Railway Company to settle her claim against the railway company for right of way over S.W. 32-27-29. (Application 9151.)

Application dismissed.

1247. Application of Theo. A. Burrows, of Grandview, Manitoba, for Order directing the Canadian Northern and Grand Trunk Pacific Railway to provide transfer facilities for the joint handling of traffic between the railway companies at Petrel, Manitoba. (Application 5898.)

Order made directing Canadian Northern Railway Company to construct transfer tracks before June 1, 1909, each company to pay half the cost.

1248. Complaint of Graingrowers' Association, of Ashville, Manitoba, of failure of the Canadian Northern Railway Company to fence its right of way between Dauphin and Gilbert Plains, Manitoba. (Application 9202.)

Order made upon undertaking of counsel for right of way to be fenced on or before September 1, 1909, between Gilbert Plains and Dauphin.

1249. Resolution of Order of Railway Conductors, the Brotherhood of Locomotive Firemen and Engineers, Brotherhood of Railway Trainmen and Order of Railway Telegraphers, relative to reduction of section gangs, the 'cross' snow plough, and *re* terminal clearance (as at present used), being embodied in the proposed new rules. (Application 6613.)

Application dismissed.

1250. Application of the Canadian Pacific Railway Company, under section 222 of the Railway Act, for an Order granting authority to construct, maintain and operate a branch line of railway or spur at Beausejour, from a point in the centre line of the most southerly siding of said railway, distant about 200 feet westerly from the westerly limit of station produced, thence in a southwesterly direction across portion of northwestern quarter of section 36, township 12, range 7, east across road allowance to and into the premises of J. L. Turner. (Application 6376.)

Application granted. Order issued.

1251. Application of the Canadian Pacific Railway Company, under section 175 of the Railway Act, for an Order authorizing the construction, maintenance and operation of the branch line of railway or spur from a point on the centre line of the town siding of the applicant company, distant about 55 feet westerly from the head block of the said town siding, thence in a southtwesterly, southerly, and again southwesterly direction across part of the north meridian, across and along the road allowance to and into the northwest quarter of section 36, township 12, range 7, east principal meridian, in the province of Manitoba, a total distance of about 2,280 feet. (Application 1155.)

No Order made, as the Order in previous application covers this also.

1252. Complaint of Winnipeg Elevator Company, Limited, respecting certain charges made by the Canadian Pacific Railway for drawing plans, preparation of leases of elevator sites, &c. (Application 8530.)

Application refused. Board has no jurisdiction.

1253. Application of the city of Winnipeg, Manitoba, for an Order authorizing them to construct a bridge between Brown and Brant streets, in the city of Winnipeg, over the yards of the Canadian Pacific Railway, and directing the railway company to contribute towards the cost of construction of said bridge such sums as to the Board seems just. (Application 5729.)

Application dismissed.

1254. Application of the Canadian Pacific Railway, under section No. 237 of the Railway Act, for authority to lay tracks across the road allowance on its Molson branch between mile 99 and mile 124. (Application 7653.)

Application granted. Order issued.

1255. Application of the corporation of the city of Winnipeg, Manitoba, under the Railway Act, for authority to connect the tramway of the city of Winnipeg, running from Lac du Bonnet to Point du Bois, with the branch of the Canadian Pacific Railway Company running from Molson to Lac du Bonnet (Application 6845. Case 2927.

Application dismissed.

1256. Application of the city of Winnipeg, Manitoba, under section 237, for an Order directing the Canadian Pacific Railway Company to provide and construct a suitable highway crossing over its line of railway between Talbot avenue and Carter avenue, or in the alternative to allow the city to construct such crossing or for such order as to the Board seems just. (Application 8223. Case 3769.)

Order made granting applicant leave to construct crossings over Louise bridge spurs at Talbot, Chalmers, Poplar and Gordon streets and over Selkirk branch at Talbot, Chalmers and Nairn streets, expenses to be borne by the city of Winnipeg.

1257. Application of the city of Winnipeg, Man., for Order directing the Canadian Pacific Railway to remove its tracks from McPhillips street, Winnipeg, Manitoba. (Application 2050.)

Stands at request of applicant to arrange a settlement.

1258. Complaint of the Hanbury Manufacturing Company of Brandon, Man., alleging discrimination in favour of Winnipeg on shipments to points on Regina branch of Canadian Northern Railway via Regina, from Brandon and Winnipeg, Man. (Application 7308.)

Application dismissed. Complaint settled.

1259. Petition of the secretary of the Board of Trade and residents of Welwyn, Sask., that the Canadian Pacific Railway Company appoint and maintain a permanent agent at that point. (Application 9274.)

Withdrawn by applicant.

1260. Complaint of the Manitoba Grain Growers' Association, of Kelloe, Manitoba, against the Canadian Pacific Railway Company removing its agent from that point. (Application 9115.)

Application dismissed.

1261. Petition of residents of Basswood and surrounding district that the Canadian Pacific Railway Company be required to keep the station at that point open permanently and provide an agent therefor. (Application 9126.)

Counsel stated the company is appointing agent at Basswood.

1262. Complaint of George Steel, Glenboro, Manitoba, of failure of the Canadian Pacific Railway to furnish an efficient and proper supply of cars for the movement of grain traffic from that point. (Application 8808.)

Application dismissed.

1263. Complaint of the Swan River Board of Trade, of Swan River, Man., alleging failure of the Canadian Northern Railway to furnish cars for prompt and efficient movement from that point. (Application 4824.)

Application dismissed.

1264. Complaint of M. McGregor, of Tilston, Man., on behalf of the farmers and citizens of that town against the poor service of the Canadian Pacific Railway between Lauder and Tilston, Man. (Application 9125.)

Application dismissed.

1265. Application of the Williams Quarry Co., Ltd., of Winnipeg, Man., for an Order directing the Canadian Pacific Railway Company to remove illegal and unjust

discrimination in freight rates on shipments of the products from their quarry at Airedale, Man., to Winnipeg, Man. (Application 8494. Cace No. 3956.)

Application dismissed.

1266. Complaint of the Manitoba Grain Growers' Association, alleging that the Canadian Pacific Railway Company and Canadian Northern Railway Company charge excessive freight rates on bulkheaded cars of grain going to Fort William and Port Arthur, Ont. (Application 8688.)

Application dismissed.

1267. Application of the Kemp Manufacturing Company and Winnipeg Ceiling and Roofing Company, for an order directing the railway companies to equalize their freight rates on metallic shingles and sidings from eastern points to points in Manitoba, Saskatchewan and Alberta, as against the freight rates charged on the manufactured product. (Application 4756. Case No. 1460.)

Application dismissed.

Note.—Since dismissal applicants have applied to have case reinstated and the request was granted and the matter heard in Winnipeg, March 10, 1909, and stands for judgment.

1268. Complaint of Grain Growers' Association, Winnipeg, alleging long delay on the part of the railways in repayment to shippers of grain for lumber supplied for car doors. (Application 8483.)

Order made that where shippers upon railways subject to the jurisdiction of the Board in the provinces of Manitoba, Saskatchewan and Alberta are compelled to furnish car doors to enable cars to be used for traffic, allowance is to be made therefor upon the following basis: (1) Lower car door, one dollar; (2) upper car door, fifty cents; and adjustment upon the above basis shall be made by the agent at or nearest to the point of shipment by (*a*) at the time of shipment, payment to the shipper of the account out of funds of the railway company, of which he is agent, in his hands; or (*b*) the shipper may deduct from the freight charges, if any, payable by him upon the shipment in such car for which the said door or doors were so supplied, the amount of such bill upon the foregoing basis, receipting the same and turning the account into the agent as so much cash.

1269. Application of the Winnipeg Jobbers' and Shippers' Association, of Winnipeg, Man., for an order requiring railway companies to provide car-load rating from eastern Canada points to Winnipeg, Man., on blankets. (Application 4603. Case 1313.)

Application refused.

1270. Application of the Western Live Stock Shippers' Association, under sections 284 and 317 of the Railway Act, for an Order directing the Canadian Pacific Railway Company and the Canadian Northern Railway Company to furnish certain facilities for the receiving, unloading, accommodation and transportation of live stock. (Application 8234.)

Note.—This case is specially set down for February 3, 1909.

Referred to Board's operating assistant to inspect and investigate in May or June.

1271. Application of the Western Live Stock Shippers' Association, under section 323 of the Railway Act, for an Order directing the railway companies to reduce: (*a*) The existing freight tariff for cattle and live stock from points in the provinces of Alberta, Saskatchewan and Manitoba to Winnipeg. (*b*) The minimum car weight of hogs from 20,000 pounds to 16,000 pounds. (Application 8233. Case 3773.)

Stands for judgment and for report of Chief Traffic Officer of Board.

1272. Application on behalf of Joseph Lemon and others for an Order providing that liability for loss or damage to shipment of horses shall not be limited to $100 for each animal, but that fair value shall be recovered. (Application 8214. Case 3761.)

By agreement complaint dropped and matter to go to the Canadian Freight Association.

1273. Complaint of R. S. Robinson, of Winnipeg, Manitoba, against the restriction imposed by the Dominion Express Company in the carriage of furs to Great Britain by charging excessive rates for insurance on goods. (Application 8859.)

Reserved until general question of express rates dealt with.

1274. Application of the Canadian Northern Express Company with respect to division of earnings on what is referred to by the Canadian Northern and Dominion Express Companies as special traffic matter, embracing packages not over seven pounds, and certain printed matter carried in competition with the post office, shipped from points east of Sudbury or North Bay to northern points west of Winnipeg; subsection 5, section 'C,' page 18 of the Express Freight Classification for Canada, No. 1 revised to August 1, 1905. (Application 4397.)

Reserved until general question of express rates dealt with.

1275. Complaint of Denmark & Burton, of Langenburg, Saskatchewan, alleging excessive rates charged by the Dominion Expresss Company on cream shipments. (Application 8539.)

Application dismissed.

1276. Complaint of Manitoba 'Free Press,' Telegram Printing Company, and Tribune Publishing Company, of Winnipeg, Manitoba, respecting rates charged by express companies for the carriage of newspapers. (Application 8555.)

Reserved until general question of express rates dealt with.

1277. Complaint of the Winnipeg Jobbers and Shippers' Association of Winnipeg, Manitoba, alleging excessive express rates and unfair classification of express companies doing business in western provinces. (Application 4798.)

Reserved until general question of express rates dealt with.

1278. Application of the Express Traffic Association for an Order permitting them to file for approval express freight classification, graduated rate tables, money classification, C.R.C. Nos. 1, 2 and 3, for Canadian business; and to withdraw Canadian classification and money classification, C.R.C. Nos. 1 and 3 filed on March 1, 1907 (Application 4397. Case 3693.)

Stands for judgment.

1279. Approval of tariffs of tolls of express companies pursuant to the provisions of section 348 of the Railway Act. (Application 4214. Case 1503.)

Stands to be dealt with when general question of express rates is disposed of.

1280. Application of W. R. Ritchie, of Winnipeg, Manitoba, for an Order compelling the Canadian Northern Railway to either proceed to arbitration or withdraw the registration of their location where the same affects his property on lots 33 and 34, block 8, D.G.S. 30, St. Boniface, Man.

Application granted. Order issued.

1281. Complaint of the Winnipeg Board of Trade, respecting alleged demand of the Canadian Pacific Railway, that shippers in Winnipeg sign a release form for freight shipped to regular or flag stations. (Application 2338.)

Order made, that from February 8, 1909, the form of release of responsibility for freight shipped to flag stations, upon the lines of all railways in Canada, subject to the jurisdiction of the parliament of Canada, be in the following form:—

'In consideration of the Railway Company having received the above described property for transportation from station to station do hereby release said company from all loss or damage that may occur to any of the above mentioned property after it has been unloaded from the cars at station, the said station being a flag station without agent.'

It is also Ordered that no other form of release shall be required to be signed by any shipper of any property to any flag station upon any line of railway in Canada until further Order (if any) regarding facilities and conveniences to be established by railway companies at flag stations.

1282. Complaint of Jefferson Cowerly, of Bowsman, Manitoba, respecting train service and condition of the Melfort branch of the Canadian Northern Railway. (Application 2145 and 2192.)

Application dismissed.

1283. Petition of the legislative assembly of Manitoba, asking that railways operating in the province of Manitoba be required to pay demurrage in all cases where such companies are not able or fail to furnish cars within one week after being ordered, said demurrage to be at the same rate per day as charged by railway companies when a car is not loaded in a given time after being placed at a loading platform or elevator, and to be deducted from the freight rate. (Application 4235.)

Stands at request of Attorney General for province of Manitoba until next sittings of Board in Winnipeg.

1284. Complaint of the Nepigon Bay Fish Company and other shippers at fish shipping points along the north shore of Lake Superior, of refusal to the Canadian Pacific Railway and Dominion Express Company to carry fish on passenger trains. (Application 4910.)

Application dismissed.

1285. Application of D. A. Keizer, C.E., engineer of the municipality of St. Pauls, for authority to lay a culvert under the tracks of the Canadian Pacific Railway at Rossmore avenue, lot No. 3, St. Paul's parish. (Application 2433.)

Application dismissed.

1286. Complaint of the Manitoba branch of the Canadian Manufacturers' Association, respecting rates of express companies doing business in western Canada.

Reserved until after general question of express rates dealt with.

1287. Complaint of Geo. W. Jones Company respecting delivery limits of express companies doing business in Winnipeg, Manitoba, and extra charges for delivery of shipments beyond such delivery limits.

Reserved until after general question of express rates dealt with.

1288. Complaint of the municipal council of the town of Dauphin, Manitoba, alleging neglect of the Canadian Northern Railway Company to build suitable crossings, fences and cattle-guards on its Winnipegosis and Swan River sections. (Application 9289.)

Stands to be treated as an application to compel Canadian Northern Railway Company to fence their line and to be dealt with by general order of Board at May sittings, Ottawa.

1289. Application of Thomas Littlejohn, of Crandall, Manitoba, under section No. 253 of the Railway Act, for an order directing the Grand Trunk Pacific Railway to provide and construct a suitable farm crossing where the company intersects his farm in section 29, township 13, range 25, Manitoba. (Application 9275. Case 4456.)

Application granted.

1290. Application of the Grand Trunk Pacific Railway Company to compel the municipalities of Miniota and Hamiota to remove wires which have been placed across the tracks of the company without the authority of the Board. (Application 9221.)

Upon consent of applicant company, matter stands, Board granting permission to municipality to file application under section 246, Railway Act, to carry wires over Grand Trunk Pacific Railway tracks.

1291. Complaint of Manitoba Wind Mill and Pump Company, Brandon, Manitoba, *re* the express rates and service of the express companies doing business in the west.

Reserved until after the general question of express rates is dealt with.

1292. Petition of people from Rosenfeld that Canadian Pacific Railway bridge over Buffalo lake causes damage to lands from flooding.

Reference to Board's engineer; the applicants to notify him when to go and inspect.

1293. Complaint of John Bearns, Limited, Winnipeg, Manitoba, respecting express rates and service.

Reserved until after the general question of express rates dealt with.

1294. Complaint of the Winnipeg Wholesale Implement Association, respecting rates charged by express companies operating in western Canada.

Reserved until after the general question of express rates is dealt with.

1295. Application of the city of Winnipeg for an Order directing the Canadian Northern Railway Company to provide proper protection where its railway crosses Pembina street, Winnipeg. (File 1124. Case 406.)

Application dismissed.

1296. Application of the city of Winnipeg, Manitoba, for an Order approving of the plans of the Salter street bridge across the tracks of the Canadian Pacific Railway at Winnipeg. (File 3084.)

Standing for settlement between the parties.

1297. Application of the city of Winnipeg for an Order directing the Canadian Pacific Railway, Canadian Northern Railway, and the Grand Trunk Pacific Railway companies and other companies operating trains to prevent the unnecessary and unreasonable emission of smoke from engines, and for an Order prohibiting whistling by locomotives within the city. (File 9346. Case 4489.)

Order made and issued dealing with emission of smoke and prohibiting unreasonable and unnecessary whistling.

1298. Complaint of D. L. Stewart on behalf of the village of Rosenfeld, Man., regarding the stopping or obstructing of a water course by the Canadian Pacific Railway Company. (Application 9515.)

Stands for report of Board's engineer. Applicants to notify engineer when he is to go to make inspection.

1299. Complaint of the city of St. Boniface under section 26 of the Railway Act, that the Canadian Northern Railway Company has failed to comply with the Order of the Board, dated October 16, 1905. (File 1413.)

Application dismissed as arrangement made between the parties.

1300. Complaint of the Anchor Elevator and Warehousing Company regarding the interpretation given by the Canadian Northern Railway Company of tariff C. N. No. 462 dealing with switching charges between the Canadian Northern Railway and sidings on the Canadian Pacific Railway in Winnipeg. (Application 9816.)

Judgment of Board that $5 charge is reasonable and tariff should be filed accordingly. That tolls in excess of $5 already paid cannot be refunded. Canadian Pacific Railway Company added as a party respondent.

1301. Complaint of the Northern Elevator Company regarding switching charges on grain consigned from Canadian Northern points to complainant's terminal elevator on Canadian Pacific Railway tracks in Winnipeg.

See judgment in application No. 9816 immediately preceding.

1302. Petition of residents of the districts of Silver Plains, Manitoba, regarding train service to Winnipeg on the Great Northern Railway.

Order made directing trains to stop at St. Agathe.

1303. Application of A. E. Hill, of Griswold, Man., for an Order directing the Canadian Pacific Railway Company to issue 1,000 mile ticket at $25 to travel over the western division and branch lines in Manitoba, Saskatchewan and Alberta.

Application dismissed.

1304. Complaint of H. H. Shields, of Melton, Man., against excessive rates charged by the Canadian Northern Railway Company for warehousing carload of wheat consigned to their warehouse at Port Arthur, Ont. (File 9022.)

Application refused.

1305. Application of M. McGregor, of Eagleton P.O., Tilston, Man., for a semi-weekly mail service by train instead of by stage or mail carrier system; for an Order

that an agent be placed at the station in question; and for an order directing the Canadian Pacific Railway Company to re-name the town 'Eagleton.'

Application dismissed.

1306. Application of city of Winnipeg to conduct sewer under Brown & Rutherford's spur, Canadian Pacific Railway, where same crosses Sutherland avenue, Winnipeg. (Application 9363. Case 4494.)

Application granted; order issued.

1307. Application of city of Winnipeg to construct sewer under West Selkirk branch of Canadian Pacific Railway where same crosses Aberdeen avenue, Winnipeg. (Application 9539. Case 4609.)

Application granted. Order issued.

1308. Application of city of Winnipeg to construct sewer under Winnipeg Transfer Railway (Canadian Northern Railway) where same crosses Lombard street, Winnipeg. (Application 9596. Case 4659.)

Application granted. Order issued.

1309. Application of the Canadian Northern Quebec Railway Company, under section 167, for approval of deviation of its railway in parish of Cap Sante, county of Portneuf, P.Q., between stations 1417—49 to 1473—39.7 west of Quebec bridge. (Application 668. Case 3725.)

Application granted. Order issued.

1310. Application of the Canadian Northern Ontario Railway, under section 159, for an Order approving of the location of its line of railway through the town of Trenton, county of Hastings, mile 144 to mile 146, west from Ottawa. (Application 3878. Case 1554.)

Application withdrawn.

1311. Application of the Canadian Pacific Railway, under section 26, for an Order directing the Ingersoll Electric Light and Power Company to remove forthwith twelve wires erected by the said electric company across the railway company's tracks in the town of Ingersoll, on the east side of Thames street, or for an order directing the said electric company to re-erect said wires forthwith and to maintain the same in accordance with the standard conditions and specifications respecting wire crossings sanctioned by the Board. (Application 1516. Case 4356.)

Order issued directing the electric company to re-erect their wires in accordance with conditions named by Board's electrical engineer. Work to be completed by 2nd April, 1909. Penalty of $25 for every day default is made in complying with terms of Order.

1312. Complaint of Owen Davidson, Almonte, Ontario, *re* alleged excessive whistling of engines of the Canadian Pacific Railway within the town of Almonte, Ontario. (Application 8426.)

Application dismissed.

1313. Application of the Canadian Pacific Railway, under sections 222 and 237, for an Order authorizing the construction, maintenance and operation of a branch line of railway or spur in the city of Montreal, commencing from a point on the centre line of the most westerly track leading to the freight car repair shop of the said company, distant about 250 feet northerly from the northerly end of freight car shop, thence in a southwesterly and northwesterly direction across De Levis street to and into the premises of the Montreal Gas Company, now leased to the Montreal Light, Heat and Power Company, situated on Cadastral lot 159 in the Hochelaga ward of the city of Montreal, a distance about 1,780 feet, together with another siding about 550 feet in length. (Adjourned hearing.) (Application 8152. Case 3708.)

Application granted, Order issued.

1314. Application of the Canadian Pacific Railway, under section 178, for authority to take lands adjoining its railway in the city of Montreal, P.Q., as shown on plan filed with the Board.

Lands adjoining Place Viger station. Application 9332. Withdrawn by Canadian Pacific Railway Company.

1315. Application of the Canadian Pacific Railway, under section 29, for an Order of the Board No. 3242, in reference to the crossing of the National Transcontinental Railway and the Canadian Pacific Railway at St. Basile, P.Q. (Application 2642. Case 4455.)

Application dismissed.

1316. Application of the Export Lumber Company, Ottawa, Ontario, under sections 227 and 284, for an Order directing the Grand Trunk Railway and the Canadian Pacific Railway to provide a connection by a branch line between the sidings of these two companies at present constructed across Preston street and York street, Ottawa, Ontario, for the purpose of affording more adequate facilities for the applicant company. (Adjourned hearing.) Application 8791. Case 4139.)

Application refused.

1317. Application of the Export Lumber Company, Ottawa, Ontario, under sections 226 and 227, for and Order directing the Grand Trunk Railway to permit its siding, as constructed across Preston street, Ottawa, to be joined with proposed siding of the applicant company, in its lumber yard at Preston street, Ottawa, Ontario. (Adjourned hearing.) (Application 8790. Case 4138.)

Application granted. Grand Trunk Railway Company directed to permit siding to be joined with proposed siding of the applicant as shown on plan filed.

1318. Application of the People's Telephone Company, Sherbrooke, province of Quebec, for an Order directing the Grand Trunk Railway to permit them to install telephones in ticket and freight offices of its railway at Richmond, Danville, Windsor Mills, Bromptonville, Sherbrooke, Lennoxville, Waterville, Compton, Coaticook, Dixville and Norton's Mills. (Application 8883. Case 4375.)

Judgment reserved. Subsequently general form of Order for this and like applications settled upon and order in this case granted.

1319. Complaint of McLennan & Company, Lindsay, Ontario, respecting freight rates charged by the Grand Trunk Railway on hard coal from Black Rock and Suspension Bridge, New York, to Lindsay, Ontario, as compared with the company's rates to Combray, Coboconk, Peterborough, Lakefield, Port Hope and Belleville, Ontario. (Application 7533.)

Order made directing the Grand Trunk Railway Company to reduce its rate on coal in carloads from Suspension Bridge, Bridge Rock and Buffalo, to Lindsay, Ontario, to $1.15 per ton, 2,000 pounds, subject to a compliance with the provisions of subsection 5 of section 315, Railway Act.

1320. Complaint of the Dominion Concrete Company, Limited, Kemptville, Ontario, respecting alleged failure of the Canadian Pacific Railway to refund money paid to the railway on account of private siding built to the applicant's industry. (Application 8758.)

Application dismissed.

1321. Complaint *re* Brockville train connection on Canadian Pacific and Grand Trunk Railway companies' lines.

Note.—This complaint is set down for the purpose of considering the terms of proposed Order. (Application 5320. Case 2863.)

Stands pending the settlement of terms of proposed Order of Board.

1322. Complaint of J. L. Sundabe, of Hitchcook, Sask., that the Canadian Pacific Railway Company has refused to put in a crossing over the road allowance in section 22, township 3, range 9, west of the 2nd meridian. (Application 9127.)

No action taken as complainant states company have put in the crossing.

1323. Petition of settlers along the Pheasant Hills Branch of the Canadian Pacific Railway for a siding on or near N. E. ¼ section 22, tp. 17, range 32, west of the 1st meridian, between Rocanville and Tantallon, Sask. (Application 7047.)

Application dismissed.

1324. Petition of the farmers and grain growers in Saskatoon county, Saskatchewan, for loading platform at a siding on section 8-36-6, W. 3rd, of the Goose Lake Branch, about nine miles southeast of Saskatoon. (Application 8404.)

Application dismissed.

1325. Application of the Board of Trade, of Heward, Sask., under section 237 of the Railway Act, for leave to construct a highway crossing over the Canadian Pacific Railway in the village of Heward, Sask. (Application 8092.)

Application granted, order made.

1326. Application of the Saskatchewan Local Improvement Association, of Grenfell, Sask., that the railway companies in the province of Saskatchewan be compelled to either fence their tracks or pay compensation in full for all damage done to stock by trains, and shall pay for all damage done to cultivated crops, hay, barns, &c., caused by their engines setting out fires. (Application 7434.)

Stands for judgment.

1327. Complaint of W. R. Jamieson, of Lumsden, Sask., of failure of the Canadian Northern Railway Company to fence its right of way. (Application 8765.)

Order made directing railway company to properly fence its right of way through complainant's lands by 15th May, 1909.

1328. Complaint of W. O. Miller, *et al*, of Tessier, Sask., that they are unable to secure settlement from the Canadian Northern Railway Company for property taken for railway purposes situated in township 33, range 10, section 16, west of the 3rd meridian. (Application 9083.)

Application dismissed.

1329. Petition of W. H. Lawrence and other merchants and farmers of Aberdeen, Sask., for an Order directing that a crossing be built over the Canadian Northern Railway in the townsite of Aberdeen at Fifth avenue. (Application 8463.)

Order made for crossing in a line with Eight avenue extending south to south side of right of way of railway company to grade and construct a roadway along the side of right of way to point opposite railway depot.

1330. Complaint of Charles Mann, of Lumsden, Sask., of failure of the Canadian Northern Railway Company to properly fence its right of way where it affects the northeast quarter section 21, township 19, range 21, west of the second meridian. (Application 8809.)

Order made for railway company to fence both sides of right of way on or before May 15, 1909.

1331. Application of Charles Mann, of Lumsden, Sask., under section 252 of the Railway Act, for an order directing the Canadian Northern Railway Company to provide and construct a suitable farm crossing where the company's railway intersects his farm on lot southeast quarter section 31, township 19, range 21, Lumsden, Sask. (Application 8809. Case 4213.)

Order made for farm crossing work to be finished before July 1, 1909.

1332. Petition of the residents of Maryfield, Sask., requesting that the Canadian Pacific Railway Company and the Canadian Northern Railway Company erect and provide a union station at Mayfield, Sask. (Application 7813.)

Order made on consent for union station and joint facilities at Maryfield. Terms to be agreed upon by companies before May 1, 1909, and if not Board will settle on application of any interested party.

1333. Application of the citizens and residents of the district of Zelma, Saskatchewan, for an order directing that the Grand Trunk Pacific Railway continue the operation of its line of railway in that district for the transportation of freight and passenger service; that the railway at once build and put in shape a crossing over its tracks opposite the main street in the new townsite known as Zelma, and erect and maintain a station house with necessary freight room accommodation. (Application 9294.)

Order made directing railway company to construct suitable and temporary crossing by 28th February, 1909, at Zelma near west side of Main street. Balance of petition dismissed.

1334. Application of the city of Saskatoon, Sask., for an Order directing the Canadian Northern Railway to erect, operate and maintain gates at the Spadina Crescent and Twenty-third streets, Saskatoon, Sask. (Application 8993. Case 4285.)

Order made for the gates at Twenty-third street to be erected by company, one-half of cost of maintenance borne by each, guard rail at Spadina Crescent to be put in by May 1, 1909.

1335. Application of the Board of Trade of Dundurn, Sask., under the Railway Act, for an Order directing the Canadian Northern Railway Company to provide crossings over their tracks through the yard at Dundurn, Sask. (Application 8965. Case 4261.)

Order made in accordance with agreement at hearing.

1336. Application of the Canadian Northern Railway Company, under section 45, for an Order setting aside order of the Board dated 29th day of November, 1907, authorizing the village of Dundurn to construct a highway over the track of the Canadian Northern Railway Company. (Application 5272. Case 1882.)

Order made in accordance with agreement at hearing.

1337. Petition of Dundurn Board of Trade, and of residents of Dundurn, Saskatchewan, that the Canadian Northern Railway be required to provide additional siding accommodation for the handling of freight traffic at that point. (Application 6919.)

Order made in accordance with agreement reached at hearing.

1338. Application of the Canadian Northern Railway Company, under section 227 of the Railway Act, for authority to connect the tracks of its Brandon-Regina branch with the tracks of the Canadian Pacific Railway Company (Arcola branch) at a point on northwest quarter section 20, township 17, range 10, west of the 2nd meridian. (Application 6003. Case 2542.)

Order made on consent. Engineer to inspect the plans.

1339. Application of the Canadian Pacific Railway Company, under section 222 of the Railway Act, for authority to construct, maintain and operate a branch line of railway in the city of Regina, from a point on the northerly boundary of the station grounds of the railway company between Broad and Rose streets, thence in a northerly direction across Dewdney street and Eighth avenue, along lane running parallel to and between Board street and Rose street to the southerly limit of Seventh avenue, a distance of about 1,500 feet, together with five other branch lines of railway or spurs commencing from the first mentioned spur. (Application 6648. Case 2809.)

Application dismissed.

1340. Application of the Canadian Pacific Railway Company, under section 237 of the Railway Act, for authority to lay its tracks across highways on Hudson's Bay Mining Company's spur at Bienfait, Sask. (Application 4545. Case 2799.)

No order made.

1341. Application of the city of Regina, Sask., under sections 237 and 238 of the Railway Act, for an order directing the Canadian Pacific Railway Company to provide and maintain a suitable subway where the company's railway intersects Broad street in the city of Regina, Sask. (Application 8747. Case 4112.)

Application dismissed.

1342. Application of the city of Regina, Sask., for an Order authorizing a change in the location of Hamilton street, where it crosses the tracks of the Canadian Pacific Railway Company to the station grounds, Regina, Sask. (Application 999.)

Application dismissed.

1343. Application of the city of Regina, for an Order under sections 237 and 238, directing construction of subway at Albert street, Regina, by the Canadian Pacific Railway. (Application 8748. Case 4113.)

Application granted. Order issued.

1344. Application of the Board of Trade of Regina, Sask., that the Canadian Pacific Railway Company and the Canadian Northern Railway Company provide and construct a union station in the city of Regina, Sask. (Application 5166.)

Application refused.

1345. Application of the Canadian Pacific Railway Company for an Order, under section 29, varying order of the Board dated 4th July, 1907 (No. 3245), so as to provide that the fireguards to be constructed in the provinces of Alberta and Saskatchewan under clauses No. 8 and No. 9 of the said Order, be constructed as follows:—

That two strips of land not less than eight feet in width be ploughed on each side of the railway at a distance of not less than 300 feet from the centre line of the railway, and that a clear space of 20 feet be maintained between the said strips, which space shall be burned over and afterwards kept free of flammable material.

The company further applies, pursuant to the provisions of paragraph 11 of the said Order, for a direction that it shall not be required to establish and maintain such fireguards on such portions of its lines of railway in the provinces of Alberta and Saskatchewan where the nature of the country renders it impossible or impracticable to do so, or where the doing so would involve serious loss and damage to property. All such space and portions of land being shown on the plans submitted. (Application 4741. Case 1859.)

Note.—This application has also been set down for hearing at Edmonton, Alberta, on 19th February, 1909.

Stands for further consideration and evidence.

1346. Complaint of J. R. Standen and other residents of Osage, Saskatchewan, alleging that the Canadian Pacific Railway propose closing its station at that point, and asking that the railway company be required to continue to maintain its station at that point. (Application 9204.)

Complaint withdrawn.

1347. Complaint of Rosaleigh school district, No. 820, of Frobisher, Saskatchewan, of failure of Canadian Pacific Railway to provide station agent or operator at Hirsch, Saskatchewan. (Application 9268.)

Application dismissed.

1348. Complaint of the Elstow Board of Trade, Elstow, Saskatchewan, alleging delay on the part of the railway companies in the transportation and delivery of coal shipments at Elstow, Saskatchewan. (Application 8637.)

Application dismissed.

1349. Complaint of Ben Yake, of Moosejaw, Saskatchewan, alleging overcharge on shipment of settlers' effects from Mount Forest to Moosejaw, Saskatchewan. (Application 9137.)

Order made permitting Canadian Pacific Railway Company to make refund of overcharge admitted.

1350. Complaint of the Board of Trade of Strasburg, Saskatchewan, respecting freight rates charged by the Canadian Pacific Railway Company on lumber shipments to Strasburg, Saskatchewan. (Application 2671.)

Complaint withdrawn.

1351. Application of the Board of Trade of Guernsey, Saskatchewan, for an Order directing the Canadian Pacific Railway Company to give to Guernsey a lower rate on grain to the terminal elevators at Fort William than at present furnished. (Application 8525.)

Application dismissed.

1352. Application of the Board of Trade of Alameda, Saskatchewan, alleging excessive freight rates charged by the Canadian Pacific Railway Company on coal to that point. (Application 9209. Case 4408.)

Order made that railway company substitute for its present rates on coal, in carloads, from Bienfait, Saskatchewan, to the points named, the rates per ton of 2,000 lbs. as follows:—

From Bienfait to	*Rates.*
Hirsch, Sask.	$ 0 50
Frobisher, Sask.	0 50
Alameda, Sask.	0 70
Oxbow, Sask.	0 75
Glen Ewen, Sask.	0 80
Carnduff, Sask.	0 85
Carievale, Sask.	0 85
Gainsborough, Sask.	0 90
Pierson, Man.	0 90
Elva, Man.	0 95
Melita, Man.	0 95
Napinka, Man.	1 00
Lauder, Man.	1 05

Also Ordered that rates from other stations or colleries contigous to Bienfait, and to all other stations where dislocation of customary basess may ensue from the changes ordered, be graduated proportionately to those from Bienfait and to the points of consumption herein designated. Also Ordered that application for reduction in the minimum weight of twenty tons per car be dismissed.

1353. Complaint of W. B. Bashford, of Rosthern, Saskatchewan, alleging excessive freight rates of the Canadian Northern Railway on coal from Taber, Alberta, to Dalmeny, Saskatchewan. (Application 7740.)

Order made requiring Canadian Northern Railway and Canadian Pacific Railway to file a joint tariff on coal from Taber to Dalmeny at the same rate as from Taber to Rosthern.

1354. Complaint of the Saskatchewan Grain Growers' Association of Indian Head, Saskatchewan, alleging excessive freight rates on lumber and coal shipments. (Application 4463.)

Application dismissed.

1355. Complaint of the Eureka Coal and Brick Company of Estevan, Saskatchewan against discrimination by the Canadian Pacific Railway Company, in freight rates and switching charges on their products in favour of Pinto, Roche Percee and Bienfait, Saskatchewan. (Application 7037.)

Stands for judgment.

1356. Complaint of Stockton & Mallinson, wholesale fruit and produce merchants of Regina, Saskatchewan, alleging that the rate charged by the Canadian Pacific Railway Company on shipments of oranges from points in the State of California, in the United States of America, to Regina, is unreasonable, as compared with the rate charged from the said points in California to points in the provinces of Manitoba and Ontario. (Application 6622.)

Order made directing the Canadian Pacific Railway Company to arrange with its connections for publication of new tariff from California shipping points to Regina via King's Gate or Emerson on basis of $1.60 per 100 pounds from Los Angeles points, on oranges in straight carloads; or on mixed carloads of oranges and lemons $1.45 per 100 pounds upon lemons in straight carloads.

1357. Complaint of Rosthern Board of Trade, of Regina, Saskatchewan, respecting alleged excessive rates on the Canadian Northern Express Company and Dominion Express Company's lines. (Application 4703.)

Judgment reserved pending disposition of general question of express rates.

1358. Complaint of the Board of Trade of Saskatoon, Saskatchewan, alleging excessive express charges on the express companies' lines from Winnipeg to Saskatoon. (Application 4796.)

Judgment reserved, as above.

1359. Complaint of J. M. Grover, Rosthern, Saskatchewan, respecting alleged express charges made by Dominion Express Company on box shipped from Birnie, Manitoba. (Application 7756.)

Settled by Canadian Northern Express Company undertaking to remit $3.70 excess charges.

1360. Application of the town of Indian Head, under section 250 of the Railway Act, for authority to construct and maintain a ten inch water pipe across the property and under the tracks of the Canadian Pacific Railway Company in the town of Indian Head, Saskatchewan. (Application 2510.)

Application granted. Order issued.

1361. Petition of Wm. Hoskin, Jas. Butler and others that the Canadian Pacific Railway Company be required to provide a crossing near the company's yard at Twentieth street, Saskatoon, Saskatchewan. (Application 2632.)

Application dismissed. Settled between the parties.

1362. Complaint of L. F. Dosse of Denholm, Saskatchewan, that the Canadian Northern Railway have failed to provide proper station accommodation at that point in accordance with Order of the Board No. 5021, dated July 7, 1908. (Application 6686.)

Order made directing railway company to maintain station at Denholm on location to be approved by Board, to be constructed and equipped by November 1, 1907.

1363. Complaint of Chester L. Mintminick of Churchbridge, Saskatchewan, that the Grand Trunk Pacific Railway has taken seventeen and a third acres of his property at Churchbridge, Saskatchewan, but have failed to pay for the same. (Application 3398.)

Application dismissed. Settled between parties.

1364. Complaint of Local Improvement District 21-J-3, through David Mitchell of Maymont, Saskatchewan, that the Canadian Northern Railway has not put in all crossings in that municipality. (Application 3230.)

Order made directing railway company to provide crossings at points set out in Order and to widen certain other crossings. Work to be done by June 23, 1909. Crossings to be in accordance with Board's general regulations.

1365. Complaint of the Board of Trade of Prince Albert, Saskatchewan, alleging excessive express rates on parcels to and from Prince Albert, Saskatchewan. (Application 5795.)

Application withdrawn.

1366. Petition of the residents of Rush Lake, Saskatchewan, that the Canadian Pacific Railway Company be required to construct a highway across its tracks at Rush Lake Yard. (Application 6997. Case 3028.)

Order made for road allowance to be opened and crossing put in by company.

1367. Complaint of Macdonald & Co., of Fort Qu'Appelle, Saskatchewan, regarding express rates, delays in delivery, &c.

Application dismissed.

1368. Complaints of the Board of Trade of Saskatoon and others commercially associated with Saskatoon, regarding express companies.

Judgment reserved pending disposition of general question of express rates.

1369. Complaint of the Nelson Ford Lumber Company, Limited, and the International Elevator Company, Limited, of Estevan, Saskatchewan, regarding the service furnished to them by the Canadian Pacific Railway Company over a spur commercial track built across blocks 7 and 11 in the townsite of Estevan. (Application 9348.)

Order made that, upon payment by the parties liable of all arrears of rental for the spur and upon signing of siding agreement, the railway company to remove westerly connection and establish easterly connection.

1370. Complaint of Local Improvement District 18 B-3, Saskatchewan, that the railway companies have not left the road crossings in proper state for safe crossing for vehicles, &c. (Application 9144.)

Order made directing the railway company to make the crossing in question conform to the requirements of the general regulations of the Board affecting highway crossings dated January 26, 1909.

1371. Complaint of Local Improvement District 17-M-2, Saskatchewan, regarding the failure of the Canadian Northern Railway Company to plank two crossings referred to in the complaint. (Application 8016.)

Order made directing Canadian Northern Railway Company to plank crossings by June 15, 1909, and to build fence. Question of further protection reserved.

1372. Complaint of the Golden Lion Brewing Company, Limited, Prince Albert, Saskatchewan, against the Canadian Northern Railway Company, as to the unsatisfactory state of affairs in connection with the shipping of perishable goods from that city during the winter months. (Application 9354.)

Stands for judgment. General Manager Canadian Northern Railway states that heated cars will be restored in another week.

1373. Application of Hugh Miller for an Order, requiring the Canadian Northern Railway Company to fence its right of way through the N.W. ¼, 26-19-22, W. 2nd meridian.

Order made requiring company to fence both sides of right of way on or before May 15, 1909.

1374. Petition of residents of the district of Condie, Saskatchewan, for an Order that the Canadian Northern Railway Company erect a station and freight shed at Condie, Saskatchewan. (Application 9606. Case 4663.)

Order made that the Canadian Northern Railway Company on or before June 1, 1909, erect and maintain a suitable and proper station of the third class at Condie and place an agent in charge.

1375. Application of the city of Medicine Hat, Alberta, for an Order, under section 187 of the Railway Act, that the portion of the land opposite the intersection of Main street with the right of way of the Canadian Pacific Railway Company in the city of Medicine Hat is a public highway and a portion of Main street (so-called) and for other purposes. (Application 3321. Case 10.)

Order made declaring present crossing a highway and authorizing railway company to open, and dedicate.

1376. Application of the city of Medicine Hat, Alberta, under section 237 of the Railway Act, for an Order authorizing the construction of a highway crossing over the Canadian Pacific Railway Company's Railway at River street, in the said city of Medicine Hat, or for the construction of a subway at the said crossing of River street aforesaid. (Application 5917. Case 2490.)

Order made for highway to be constructed at River street.

1377. Application of the city of Medicine Hat, Alberta, under section 237 of the Railway Act, for an Order authorizing the construction of a pedestrian subway from the intersection of Toronto street with North Railway street under the right of way of the Canadian Pacific Railway Company to the intersection of Toronto street with South Railway street, Medicine Hat, Alberta. (Application 5915. Case 2488.)

Order made granting leave to city to construct subway at Toronto street at its own expense. Plans to be prepared by city and submitted to railway company.

1378. Application of the city of Medicine Hat, Alberta, for an Order, under section 237 of the Railway Act, authorizing the construction of an overhead bridge from Ottawa street on the south side of the right of way of the Canadian Pacific Railway Company to Ottawa street on the north side of the said right of way. (Application 5916. Case 2489.)

Application dismissed.

1379. Consideration by the Board of the question of better protection at the crossing of the Grand Trunk Railway Company's railway over Depot street in the village of Grimsby, Ontario. (Application 9374.)

Order made that Depot street crossing be protected by gates to be provided and watched by and at the expense of Grand Trunk Railway Company on or before 1st May, 1909, gates to be in charge of a day and night watchman. Wages of watchmen and maintenance of gates to be borne, 80 per cent by Grand Trunk Railway Company, 10 per cent by village of Grimsby, 10 per cent by township of North Grimsby. Pending the installation of gates, Grand Trunk Railway Company to keep a day and a night watchmen at crossing at its own expense.

1380. Application of the Canadian Pacific Railway Company under section 178, for authority to take additional lands adjoining its Place Viger yards, in the city of Montreal, province of Quebec, as shown on plan filed with the Board. (Application 9350. Case 4491.)

Order made granting application.

1381. Application of the Canadian Pacific Railway Company under section 178 of the Railway Act, for authority to take additional lands at Windsor street yard, Montreal, province of Quebec. (Application 9332. Case 4467.)

Order made granting application.

1382. Application of the municipality of Didsbury, under section 237 of the Railway Act, for leave to construct and maintain a highway crossing across tracks and right of way of the Calgary and Edmonton Railway Company, within the town of Didsbury, as a continuation of Hespeler street, within the same town, eastwardly, where such continuation would cross the right of way of the railway. (Application 8933. Case 4235.)

Order made granting leave to Didsbury to open up at its own expense a highway crossing in the line of Hespeler street, extended existing crossing at Waterloo street to remain.

1383. Application of Robert Lake, under section 250, for authority to cross tracks of the Canadian Pacific Railway with water pipe at road allowance N.E. ¼ section 34, township 7, range 4, west 5th meridian, township of Blairmore. (Application 8131. Case 3697.)

Application granted. Order issued.

1384. Application of the city of Calgary, under section 250, for authority to lay an 8-inch water main under tracks and station grounds crossing at 13th street east, Calgary, Alta. (Application 5542.)

Application granted. Order issued.

1385. Application of the city of Calgary, under section 250, for authority to lay a 12-inch water main under tracks of the Canadian Pacific Railway, at First street west, Calgary, Alta. (Application 5435. Case 2046.)

Application granted. Order issued.

1386. Application of the city of Calgary, under section 250, for authority to lay a 12-inch water main under the tracks of the Canadian Pacific Railway at 4th street west, Calgary, Alta. (Application 5436. Case 2047.)

Application granted. Order issued.

1387. Application of the city of Calgary, under section 250, for authority to lay a 10-inch water main under tracks at 11th street west (Canadian Pacific Railway), Calgary, Alta. (Application 5438.)

Application granted. Order issued.

1388. Application of the city of Calgary, under section 250, for authority to lay sewer pipes under tracks of the Canadian Pacific Railway at 5th street west, Calgary, Alta. (Application 5439.)

Application granted. Order issued.

1389. Application of the city of Calgary, under section 250, for authority to lay a 16-inch water main under tracks of the Canadian Pacific Railway at 8th street west, city of Calgary, Alta. (Application 5437.)

Application granted. Order issued.

1390. Application of the city of Calgary for an order, under section 237 of the Railway Act, for an agreement between the city of Calgary and the Canadian Pacific Railway, dated 13th December, 1906, and an order of the Board bearing same date, with respect to subway at Osler street and First street east, Calgary, under the tracks of the Canadian Pacific Railway. (Application 4659. Case 1366.)

Application dismissed.

1391. Complaint of Thomas Fitzgerald, of Crossfield, Alberta, that the train employees of the Canadian Pacific Railway Company in that district are employed an excessive length of time on continuous duty. (Application 9272.)

Application dismissed.

1392. Complaint of J. McLoughlin, High River, Alta., alleging excessive freight rates charged on Canadian Pacific Railway from Pincher Creek to Spokane, Washington. (Application 9194.)

Stands for further consideration.

1393. Complaint of Charles Knight, Calgary, Alberta, against the Canadian Pacific Railway, as follows:—

(1) Alleged discrimination in live stock rates from Strathmore to Hochelaga; also from

(2) Calgary, Gleichen, Cowley, Lacombe, Okotoks, Lethbridge, Cardson, Carstairs, Airdrie and other points in Alberta to Hochelaga, Toronto and Winnipeg.

(3) Alleged discrimination between the complainant and P. Burns & Company from various other stations in Alberta to various other stations on the company's lines, shipped under substantially similar circumstances and conditions. (Application 3730.)

Application dismissed.

1394. Complaint of Linton & Hall, Calgary, alleging excessive express charges by Dominion Express Company from Worcester, Massachusetts, to Calgary. (Application 6523.)

Reserved pending disposition of general question of express rates.

1395. Complaint of Brice H. Bunny, of Crawling Valley, Gleichen, Alberta, respecting rates and freight charges of the Canadian Pacific Railway on a registered Percheron stallion from Minnesota Transfer to Gleichen, Alberta, shipped in May, 1907.

Stands for consideration.

1396. Application of the city of Calgary, Alberta, under section 237 of the Railway Act, for authority to cross the spur of the Canadian Pacific Railway on Second street, east, with the tracks of the Calgary Street Railway, Calgary, Alberta. (Application 9306. Case 4463.)

Application granted. Order issued.

1397. Application of the city of Calgary, under section 228 of the Railway Act, for an order authorizing the making and construction of a crossing of the Canadian Pacific Railway Companys' spur track on Second street east, Calgary, by the street railway about to be constructed in that city. (File 9349. Case 4490.)

Application granted. Order issued.

1398. Application of the Western Canada Pressed Brick and Tile Company, Limited, and the Pugh & Livingstone Lumber Company, Limited, for an order, under

section 226 of the Railway Act, directing the Canadian Pacific Railway Company to grant and construct a siding on the north side of its main line immediately west of Okotoks, Alta., and for the grant and construction of a spur from the said siding of the kilns of the Western Canada Pressed Brick and Tile Company, Limited.

Application granted. Order issued.

1399. Application of the Okotoks Milling Company, Limited, for an order under section 226 of the Railway Act directing the Canadian Pacific Railway Company to grant and construct a spur from the main line of the Canadian Pacific Railway on the north side thereof from a point on the said main line in the yards of the said railway company at Okotoks, east of the mill building of the applicant company, to a point immediately in front of and south of the mill belonging to the applicant company at Okotoks.

Application granted. Order issued.

1400. Complaints of the Calgary Board of Trade regarding telegraph rates.

Withdrawn.

1401. Complaints of the Calgary Board of Trade regarding discrimination against Calgary in the present local express tariff; also a complaint regarding local freight shipments.

Reserved pending disposition of general question of express rates.

1402. Complaint of C. R. Dixon, president C. R. Dixon & Company, Limited, regarding slow freight service on perishable produce to British Columbia points.

Withdrawn.

1403. Application of the town of Vegreville, Alberta, under section 237 of the Railway Act, for Order granting leave to the municipality to construct and maintain a suitable highway crossing over the tracks of the Canadian Northern Railway at Main street in the town of Vegreville, Alberta. (Application 7748. Case 3482.)

Application withdrawn.

1404. Complaint of William Robinson, of Hurry, Alberta, that the Grand Trunk Pacific Railway has constructed its right of way across his homestead, severing six to ten acres, and made deep cut through his property, and have thrown waste material over his land, beyond its right of way. (Application 8667.)

Settled. Railway company agreeing to pay $75 damages.

1405. Complaint of the Alberta Farmers' Association respecting the condition of the bridge of the Edmonton, Yukon and Pacific Railway (Canadian Northern Railway), approved by Order of the Board No. 5691, dated November 24, 1908. (Application 8522. Case 3982.)

Application refused. No jurisdiction.

1406. Complaint of A. Landals, of Strathcona, Alberta, that the Canadian Pacific Railway has constructed a wagon road across his property, cutting his place in three parts and shutting him off from the water. (Application 8680.)

Application dismissed.

1407. Application of Sidney Ottewell, Clover Bar, Alta., for permission to allow his cattle to run under the bridge of the Grand Trunk Pacific Railway at S.W. 13-53-23, west of 4th meridian, as an under farm crossing. (Application 5722.)

Application withdrawn.

1408. Complaint of the Chairman of the Local Improvement District 27 S 4, Alberta, against the plan of the proposed subway of the Grand Trunk Pacific Railway at high crossing on the northeast quarter of section 15, township 53, range 24, west of the 4th meridian. (Application 9023.)

Order made directing subway to be constructed.

1409. Complaint of the Parkdale Coal Company, of Edmonton, Alberta, against the Grand Trunk Pacific Railway being permitted to continue their right of way through portion of river lot No. 22, Edmonton settlement survey, belonging to the Parkdale Coal Company. (Application 2236. Case 3857.)

Application dismissed.

1410. Application of the city of Edmonton, Alberta, respecting street crossings of the Edmonton, Yukon and Pacific Railway (Canadian Northern Railway) in the city of Edmonton, Alberta. (Application 352.)

Application granted. Order issued.

1411. Application of the Canadian Northern Railway Company, under section 175 of the Railway Act, for authority to construct a spur from its main line to Cushing's mill and lumber yard, Edmonton, Alta. (Application 4061. Case 729.)

Application withdrawn.

1412. Application of McDougal & Secord, Edmonton, Alberta, under sections 26, 30 and 158 of the Railway Act, for an Order declaring plan, profile and book of reference of Canadian Pacific Railway, deposited in land office, North Alberta, not to be in accordance with provision of the Railway Act so far as same affects property of the Hudson Bay Company reserve in the city of Edmonton, Alberta. (Application 1418. Case 4449.)

Order made varying former Order by cancelling location through three lots covered by second branch of the application. See reasons for judgment in Appendix D.

1413. Application of the Canadian Pacific Railway Company, under section 29 of the Railway Act, for an Order amending the Order of the Board No. 5608, made by the Board on the application of the city of Edmonton and the Strathcona Radial Tramway Company, Limited, and dated the 3rd day of November, 1908, by altering the terms upon which the said Order was made, and providing that the said city of Edmonton and the Strathcona Radial Tramway Company, Limited, shall install a half-interlocking plant at the crossing at White avenue in the city of Strathcona, with necessary derail switches on the tracks of the said Electric Railway Company, and semaphores upon the line of the Applicant company. (Application 8464. Case 4371.)

Application refused. Canadian Pacific Railway Company directed to discontinue the practice of backing its southbound train No. 224 over the said crossing.

1414. Application of the Canadian Pacific Railway Company, under sections 158 and 159 of the Railway Act, for approval and sanction of location of portion of branch line of railway from Peace avenue to Sixteenth street, Edmonton, Alberta. (Application 1418. Case 911.)

Application granted. Order issued.

1415. Application of the Grand Trunk Pacific Railway Company, under section 159, for location, east line, section 17, township 53, range 23, west 4th meridian, through Edmonton to a line between ranges 24, 25, west 4th meridian. This matter is set down for the purpose of considering the complaint of Edwards & Madore, barristers, Edmonton, Alta., respecting filing and registration by the railway company of the plans in connection with order of the Board No. 3463, dated August 15, 1907. (Application 2236. Case 1180.)

Order made refusing to rescind Order for leave to construct but limiting right of way to 100 feet where it affects the applicant's lands.

1416. Complaint of Henry Harvey, Strathcona, Alta., alleging loss sustained on certain goods shipped from Edmonton to a flag station on the line of the Canadian Northern Railway, near Bruderheim, Alta., and makes application that station agent be appointed. (Application 9098.)

Application dismissed.

1417. Complaint of J. J. Denman and other coal dealers of Edmonton, Alberta, of unjust treatment accorded by the Canadian Northern and Canadian Pacific Railway companies in compelling them to furnish doors or boards for the interior of the doorway of cars supplied to them for coal shipment.

Order made that where shippers upon all or any railways subject to the jurisdiction of the parliament of Canada, are compelled to furnish car doors to enable cars to

be used for traffic, allowance be made upon the following basis: (1) Lower car door, one dollar; (2) upper car door, fifty cents; and adjustment upon the above basis shall be made by the agent at or nearest to the point of shipment by (*a*) at the time of shipment, payment to the shipper of the account out of funds of the railway company of which he is agent in his hands; or (*b*) the shipper may deduct from the freight charges, if any, payable by him upon the shipment in such car, for which the said door or doors were so supplied, the amount of such bill upon the foregoing basis, receipting the same, and turning the account in to the agent as so much cash.

1418. Complaint of the Central Alberta Stock Growers' Association, alleging unreasonable delay on the part of the Canadian Pacific Railway Company in regard to transportation of live stock, and discrimination in the matter of personal transportation. (Application 7297.)

Adjourned at request of Mr. Stevens to next sittings at Edmonton.

1419. Complaint of the Live Stock Commissioner of Edmonton, and shippers of live stock, that where they are unable to secure stock cars for the movement of stock, box cars are supplied and planking has to be placed across the doorways, which the companies' agents refuse to supply and which entails an expense to the shippers of $2 per car for planking. (Application 9270.)

Order made that where shippers have Ordered stock cars for the shipment of live stock and are supplied with box cars and are obliged to furnish lumber for temporary doors thereof, the shipper may deduct and retain one dollar and twenty-five cents from the freight charges, if any, payable by him upon the shipment in each such car, for which the said lumber is so furnished, receipting the same and turning the account in to the agent as so much cash; or he may render to the agent of the company at or nearest to the point of shipment, an account for the actual outlay for the said lumber, which account the said agent shall pay at the time of shipment, out of the funds of the company in his hands.

1420. Resolution of members of East Clover Bar Branch of the Alberta Farmers' Association, that railways should be compelled to provide moveable partitions in their cars in order to enable individual farmers to make small shipments of cattle or hogs, thus preserving the identity of the individual consignment. (Application 9288.)

Application refused.

1421. Complaint of J. Gainer & Co., of Strathcona, Alberta, alleging excessive freight rates charged by the Canadian Pacific Railway on live stock from Wetaskiwin, Alberta, to Winnipeg, Manitoba. (Application 7824.)

Application refused.

1422. Complaint of H. A. Glaspell, alleging delay in delivery of express parcels by the Dominion Express Company at Vegreville, Alberta. (Application 4273. Case 931.)

Application dismissed.

1423. Complaint of Dr. C. N. Corbett, Edmonton, Alberta, alleging excessive express charges by express companies in the west. (Application 8973.)

Application dismissed.

1424. Complaint of Cyril Hind, of Mannville, Alberta, alleging excessive freight rates charged by the Canadian Pacific Railway Company on a horse shipped from St. John to Strathcona, Alberta.

(*Note.*) Complainant alleges that refund promised by the Railway Company has not been made. (Application 5114.)

Application dismissed, applicant having settled.

1425. Application of the city of Edmonton for an Order declaring that the plan profile and book of reference of the Canadian Pacific Railway Company location through Edmonton is not in accordance with the Railway Act, and that the same be cancelled and annulled. (File 1418. Case 4501.)

Application dismissed.

1426. Application of the city of Edmonton for an Order under section 237 of the Railway Act for leave to construct highways across the railways of the Canadian Northern Railway Company within the limits of the said city for the purpose of extending Ninth and Sixteenth streets south of the railway and connecting with Ninth and Sixteenth streets north of the said railway.

Order made granting leave to city to open up Sixteenth street acrosss the railway lands at its own expense. Railway not to receive consideration for the lands taken.

1427. Complaint of J. C. Haddock that the Grand Trunk Pacific Railway Company took possession of his lands on the E. ½ of section 8, township 53, range 4, west of 5th meridian, without full settlement. (File 792.)

Application dismissed, on statement of company's solicitor that matter is settled.

1428. Complaint of Peter Reid that the Canadian Pacific Railway Company has removed gates and cut the posts and wires where the railway affects his property, causing loss through cattle getting on the right of way and being killed. (File 3215.)

Application dismissed.

1429. Complaint of United Farmers of Alberta that railway companies have not fenced their right of ways; that grain cars are not provided with proper grain doors; that freight rates are excessive; that serious losses are sustained by reason of stock cars not being promptly spotted for unloading and by reason of unreasonable delay in transferring stock cars from one company's line to another; and that, in districts where new railway lines are being built, the farmers are compelled to sustain heavy losses because the companies do not fence or protect their right of ways while the work is being done thereon. (File 9414.)

Application dismissed.

1430. Application of owners of subdivision in the northern part of Edmonton, known as Beachmont, to have the remainder of Beachmont freed from the filing of the plan of the Grand Trunk Pacific Railway location through Edmonton, and that the railway company, at its own expense, withdraw the plan so far as concerns the Beachmont subdivision. (Application 5401. Case 2011.)

Order made cancelling registration in excess of 100 feet as located. Consent Order issued.

1431. Application of Mary Charlotte Sinclair for an Order cancelling the plans of the Canadian Pacific Railway Company, so far as they relate to lots 71 to 76, block 9, H.B.R., plan ',' Edmonton. (Application 1418.)

Judgment reserved. Matter subsequently settled between the parties.

1432. Application of J. C. Dumont for an Order directing the Grand Trunk Pacific Railway Company to treat with the applicant in respect of the damages sustained by him by the construction of the company's line upon Twenty-first street, Edmonton, or for an Order that the company's plan be cancelled and annulled as to the Twenty-first street location.

Referred to the Board's engineer to report if the property is damaged by reason of the exercising of the powers of the railway company.

1433. Application of J. G. Campbell for an Order directing the Grand Trunk Pacific Railway Company to treat with the applicant in respect of the damages sustained by him by the construction of the company's line from Twenty-first street, Edmonton, or for an Order that the company's plan be cancelled and annulled as to said Twenty-first street location.

Referred to the Board's engineer to report if the property is damaged by reason of the exercising of the powers of the railway company.

1434. Application of S. F. Mayer and Isaac Picard for an Order directing the Grand Trunk Pacific Railway Company to treat with the applicants in respect of the damages sustained by them by the construction of the companys' line upon Twenty-first street, Edmonton, or for an Order that the company's plan be cancelled and annulled as to the Twenty-first street location.

Referred to the Board's engineer to report if the property is damaged by reason of the exercising of the powers of the railway company.

1435. Application of Wm. Johnston for an Order directing the Grand Trunk Pacific Railway Company to treat with the applicant in respect of the damages sustained by him by the construction of the company's line on the street adjoining the applicant's land on the east, or for an Order that the plan, so far as it affects the said street be cancelled.

Referred to the Board's engineer to report if the property is damaged by reason of the exercising of the powers of the railway company.

1436. Application of J. Gainer & Co., of Strathcona, Alta., for lower minimum weight on live stock in double-decked cars; also for an Order authorizing the Canadian Pacific Railway Company to rebate to the applicants excessive freight on two cars of live hogs shipped from Wetaskiwin and Strathcona respectively to Victoria, British Columbia.

Application dismissed.

1437. Application of the city of Edmonton, under section 227 of the Railway Act, for authority to cross the level with the lines of its electric street railway with the necessary poles and wires to transmit power, the lines of the Grand Trunk Pacific Railway Company and the lines of the Canadian Northern Railway Company at the intersection of the lines of said companies without the limits of the said city at what is known as Norton road.

Application withdrawn.

1438. Application of the city of Edmonton, under section 227 of the Railway Act, to cross at level with the lines of its electric street railway, with the necessary poles and wires to transmit power, the lines of the Grand Trunk Pacific Railway Company and the lines of the Canadian Northern Railway Company at the intersection of the lines of said companies at Syndicate avenue, at or near its intersection with Griesbach street. (Application 9419. Case 4525.)

Application granted. Order issued. Crossing to be protected by a half interlocker.

1439. Application of the city of Edmonton, under section 227 of the Railway Act, for authority to cross at level with the lines of its electric street railway, with the necessary poles and wires to transmit power, the lines of the Grand Trunk Pacific Railway Company and the lines of the Canadian Northern Railway Company, at the intersection of the lines of said company at Alberta avenue between Charles and Phillips streets.

Referred to the Board's engineer for report.

1440. Application of farmers of Clover Bar settlement, Alberta, for construction of subway under the tracks of the Grand Trunk Pacific Railway road allowance between sections 12 and 13, township 53-23 west of 4th M., between mileage 77.619 and 112.942.

NOTE.—The Board will hear the complaint of W. F. Stevens that the subway be constructed as provided by Order of the Board, No. 4179, is only twelve feet wide.

Order made for construction by company of temporary level crossing for farm implements. Company to have leave to remove under temporary crossing when permanent subway constructed with width of at least 20 feet.

1441. Complaint of Fullerton Lumber and Shingle Co., Ltd., Vancouver, British Columbia, alleging discrimination against forest products entering Edmonton, Alberta. (Application 9868.)

Order made directing Canadian Pacific Railway Company and Canadian Northern Railway Company to publish and file joint rates on classes 6 to 10 of the Canadian classification between Edmonton and all Canadian Pacific points except Strathcona via Strathcona Junction on the basis of one cent per 100 pounds over and above the rates of the Canadian Pacific Railway Company to or from Strathcona. The Cana-

dian Northern Railway Company allowed an arbitrary proportional of $10 per carload, regardless of weight, between Strathcona Junction and sidings in the city of Edmonton, including those owned by the Canadian Pacific Railway Company, but excepting the Griffin packing house, to or from which the Canadian Northern Railway Company does not exceed rates charged for local traffic between Strathcona and Edmonton.

1442. Application of the municipal corporation of the township of Sandwich East, under section 186 of the Railway Act of 1903, for Order directing the Grand Trunk Railway to provide, construct and maintain a suitable highway crossing where the railway company intersects the Lesperance road, in the village of Tecumseh.

NOTE.—This application is set down for the purpose of considering question of expense of automatic electric bell and cut-out called for in Order No. 5989, dated December 31, 1908. (Application 7086.)

Order made that cost of installing electric bell be borne by the township of Sandwich East, bell to be maintained at expense of railway company.

1443. Accident on the Canadian Pacific Railway at Adelaide street crossing, London, Ont., on March 31, 1908; this matter is set down for the consideration of the question of protection at crossing. (Application 7395.)

Board decided, after viewing the crossing, that no protection was needed at present.

1444. Accident on the Grand Trunk Railway at East London, Ontario, April 24, 1908, at Edgerton street crossing; this matter is set down for the purpose of considering the question of protection at this crossing. (Application 7758.)

Adjourned *sine die* at request of mayor of London.

1445. Complaint of C. T. W. Piper, Vancouver, B.C., respecting filling in by Grand Trunk Pacific Railway, between Watson Island and Townsite, where the applicant is constructing a saw-mill, shingle mill, pulp and paper factory, being part of the Grand Trunk Pacific Railway location, Prince Rupert easterly, mile 50 to 100, Copper river, approved by the Board's Order, dated April 9, 1908. (Application 3452. Case 3118.)

Order made that company leave an opening or undertake to compensate if solid embankment is constructed. Company to elect within one month.

1446. Application of the Brunette Saw-mill Company, New Westminster, B.C., for order changing plan location Vancouver, Westminster and Yukon Railway, across lots 1 and 2, suburban block 1, and lots 4, 5 and 7, suburban block 8, New Westminster, B.C. (Application 5745. Case 2353.)

Stands for parties to endeavour to arrange a settlement. Subsequently reports came to the Board that the matter was being arranged.

1447. Application of the municipality of Delta, B.C., under sections 26 and 235 of the Railway Act for an Order restraining Victoria, Vancouver and Eastern Railway from crossing or interfering with River road, so-called, on the south bank of the Fraser river, within the municipality of Delta, and for a mandatory Order directing the Victoria, Vancouver and Eastern Railway to restore the said portion of the River road to the condition it was in prior to June 30, 1908. (Application 6000. Case 4431.)

Order made that the various applications made to the Board in this matter be treated as an application by the railway company for leave to divert the highway in question, and to acquire the necessary lands for the relocation of the same, as shown on the plan filed. That authority be given to the railway company to divert the highway known as the Ladner highway, and to acquire the necessary lands for the relocation of the same along the route and through the lots as shown on the plan, upon the following conditions: (1) That the whole matter be referred to J. H. Senkler, K.C., as sole arbitrator to fix and determine the amount to be paid each and all land-owners. The arbitrator to have full power and authority to dispose of all ques-

tions of costs. Also that the railway company, by June 3, 1909, do all work and furnish all material necessary to put the present Ladner highway as diverted in such condition as H. J. Cambie, C.E., shall by his report direct. Also that after the completion of the highway as provided for the company shall maintain the same for a period of three years from the date of completion. Such maintenance to be to the satisfaction of the said H. J. Cambie. If the municipality of Delta deem the highway to be out of repair they may call upon the said Mr. Cambie and the railway company to do forthwith the necessary work to carry out the Board's order. Also that all costs payable to the said H. J. Cambie shall be disposed of by the said J. H. Senkler, K.C.

1448. Complaint of J. A. Maddaugh, of Vancouver, B.C., that the Victoria, Westminster and Yukon Railway and the Canadian Pacific Railway have not connected their lines at Vancouver pursuant to order No. 3500, of the 7th of August, 1907. (Application 5734. Case 2342.)

Order made adding Victoria, Vancouver and Eastern Railway as parties and directing the connection to be made on or before 1st June, 1909.

1449. Complaint of J. A. Maddaugh, of Vancouver, B.C., respecting rates of the Victoria, Westminster and Yukon Railway Company, on lumber from British Columbia points to points in the province of Manitoba. (Application 9296.)

Order made that the Great Northern Railway Company forthwith file and publish rates on lumber, shingles and articles taking same rates via New Westminster or Vancouver in connection with Canadian Pacific Railway as follows:—From points on the Victoria, Vancouver and Eastern Railway and Navigation Co.'s line between Vancouver and New Westminster, not inclusive, to points on the Canadian Pacific Railway west of Winnipeg, except such points as may be rated direct by the Great Northern Railway Company and its connections, rates based upon one cent per 100 pounds higher than rates maintained from Vancouver by the Canadian Pacific Railway Company, the Victoria, Vancouver and Eastern Railway and Navigation Company to be allowed 2½ cents per 100 pounds.

1450. Complaint of R. Robson, Mayook, B.C., alleging poor train service on the Canadian Pacific Railway on its Crowsnest branch from Mayook to Cranbrook, B.C. (Application 9026.)

Application dismissed.

1451. Complaint of British Columbia Mills, Timber and Trading Company, of Burnaby, B.C., alleging excessive freight rates charged on the Vancouver, Westminster and Yukon Railway from Vancouver to Burnaby, B.C. (Application 7883.)

Order made that the Great Northern Railway Company operating the Vancouver, Westminster and Yukon Railway, shall forthwith file and publish rates on lumber, shingles and articles taking the same rates via New Westminster or Vancouver in connection with the Canadian Pacific Railway Company, as follows:—From points on Vancouver, Victoria and Eastern Railway and Navigation Co.'s line between Vancouver and New Westminster, not inclusive, to points on the Canadian Pacific Railway, west of Winnipeg, except such points as may be routed directly by the Great Northern Railway Company and its connections; rates based upon one cent per hundred pounds higher than rates maintained from Vancouver by the Canadian Pacific Railway Company, the Vancouver, Victoria and Eastern Railway and Navigation Company to be allowed two and one-half cents per hundred pounds.

1452. Application of the Vancouver Board of Trade for refund under Order of the Board, dated August 11, 1906, in what is known as the Transcontinental Rate Case, 31st July, 1907. (Application 542.)

Application dismissed.

1453. Complaint of A. Thompson, Dewdney, B.C., respecting express charges of the Dominion Express Company on milk shipments from Dewdney, B.C. (Application 4457.)

Stands pending the final consideration of the question of express rates generally.

1454. Application of C. T. W. Piper, Vancouver, B.C., for an order directing the Great Northern Railway Company to construct a spur to the premises of the Britannia Trading and Lumber Company, Burnaby Lake (near Vancouver, B.C.) (Application 4295.)

Application dismissed.

1455. Application of the Victoria, Westminster and Yukon Railway for an Order under sections 184 and 186 of the Railway Act of 1903, approving of the place and mode of crossing of their branch line No. 2 from False Creek to Burrard Inlet over the lane between Parker and Napier streets in the city of Vancouver, B.C. (Application 4325. Case 986.)

Application dismissed.

1456. Application of the Victoria, Westminster and Yukon Railway for an Order authorizing that company to construct a branch line within the city of Vancouver from a point on its main line north of False Creek, B.C. (Application 3698. Case 432.)

Application dismissed.

1457. Application of the Victoria, Westminster and Yukon Railway for an Order under section 177 of the Railway Act of 1903, approving of the plan and mode of crossing by their branch line from False Creek to Burrard Inlet in the city of Vancouver across the tracks of the Canadian Pacific Railway. (Application 4145. Case 807.)

Application dismissed.

1458. Application of the V. W. & Y. Ry., for an Order under section 177 of the Railway Act of 1903, approving of the place and mode of crossing by the V. W. & Y. from False Creek to Burrard Inlet of the Canadian Pacific Railway near Burrard Inlet at Victoria, B.C. (Application 3550. Case 268.)

Application dismissed.

1459. Application of the V. W. & Y. Ry. Co., under sections 184 and 186 of the Railway Act of 1903, for Order approving of the place and mode of crossing of its branch line No. 2 from False Creek to Burrard Inlet over Powell street in the city of Vancouver, B.C. (Application 4319. Case 980.)

Application dismissed.

1460. Application of the V. W. & Y. Ry. Co., for Order under sections 184 and 186 of the Railway Act of 1903, approving of the plans and mode of crossing of their branch line No. 2 from False Creek to Burrard Inlet over the lane between Hastings and Princess streets, in the city of Vancouver, B.C. (Application 4320. Case 981.)

Application dismissed.

1461. Application of the V. W. & Y. Ry. Co., for Order under sections 184 and 186 of the Railway Act of 1903, approving of the place and mode of crossing of its branch line No. 2 from False Creek to Burrard Inlet over the lane between Harris and Keefer streets in the city of Vancouver, B.C. (Application 4321. Case 982.)

Application dismissed.

1462. Application of the V. W. & Y. Ry. Co., for Order under sections 184 and 186 of the Railway Act of 1903, approving of the place and mode of crossing of its branch line No. 2 from False Creek to Burrard Inlet, over Barnard street, Vancouver, B.C. (Application 4322. Case 983.)

Application dismissed.

1463. Application of the V. W. & Y. Ry. Co., for Order under sections 184 and 186 of the Railway Act of 1903, approving of the place and mode of crossing of its branch line No. 2, from False Creek to Burrard Inlet, over Napier street in the city of Vancouver, B.C. (Application 4335. Case 991.)

Application dismissed.

1464. Application of the V. W. & Y. Ry. Co., for Order under sections 184 and 186 of the Railway Act of 1903, approving of the place and mode of crossing of its

branch line No. 2, from False Creek to Burrard Inlet, over Harris street in the city of Vancouver, B.C. (Application 4339. Case 1001.)

Application dismissed.

1465. Application of the Vancouver, Westminster, and Yukon Ry. Co., for Order under sections 184 and 186 of the Railway Act, 1903, approving of the place and mode of crossing of their branch line No. 2 from False Creek to Burrard Inlet over Boundary avenue, in the city of Vancouver, B.C. (Application 4318. Case 979.)

Application dismissed.

1466. Application of the V. W. & Y. Ry., for Order under section 177 of the Railway Act, 1903, approving of plans and mode of crossing of its branch line No. 2 from False Creek to Burrard Inlet over the tracks of the B. C. Electric Ry. Co., Limited, at Harris street in the city of Vancouver, B.C. (Application 4336. Case 998.)

Application dismissed.

1467. Application of the V. W. & Y. Ry., for an Order under section 177 of the Railway Act for 1903, approving of the place and mode of crossing over the tracks of the B. C. Electrice Ry. Co., Limited, New Westminster line, at Venables street in the city of Vancouver, B.C. (Application 3595. Case 312.)

Application dismissed.

1468. Application of the V. W. & Y. Ry., for an Order under section 177 of the Railway Act of 1903, approving of plans and mode of crossing by its branch line No. 2, from False Creek to Burrard Inlet, over the tracks of the Canadian Pacific Railway in the city of Vancouver, B.C. (Application 4315. Case 976.)

Application dismissed.

1469. Application of the V. W. & Y. Ry. Co., under section 177 of the Railway Act, 1903, for an Order approving of the place and mode of crossing over the track of the British Columbia Electric Railway Company, Limited, at Harris street, in the city of Vancouver, B.C. (Application 3596. Case 313.)

Application dismissed.

1470. Application of the Vancouver, Westminster and Yukon Railway Company, under section 227 of the Railway Act, for approval of the plant and mode of crossing of its branch line No. 2 from False Creek to Burrard Inlet, over the tracks of the British Columbia Electric Railway Company, at Powell street in the city of Vancouver, B.C. (Application 4329. Case 990.)

Application dismissed.

1471. Application of the Vancouver, Westminster and Yukon Railway Company, under section 237 of the Railway Act, for an order approving of the place and mode of crossing of its branch line No. 2, from False Creek to Burrard Inlet, over the lane between William and Napier streets in the city of Vancouver, B.C. (Application 4328. Case 989.)

Application dismissed.

1472. Application of the Vancouver, Westminster and Yukon Railway Company, under section 237 of the Railway Act, for an Order approving of the place and mode of crossing of its branch line No. 2, from False Creek to Burrard Inlet, over Raymur avenue, in the city of Vancouver, B.C. (Application 4317. Case 978.)

Application dismissed.

1473. Application of the Vancouver, Westminster and Yukon Railway Company, under section 237, for authority to cross Cordova street, with branch line, which commences at point 'A' on another proposed branch line, across south shore of False Creek east of Westminster avenue, and running to point 'B' on Burrard Inlet, city of Vancouver, B.C. (Application 4334. Case 995.)

Application dismissed.

1474. Application of the Vancouver, Westminster and Yukon Railway Company, under section 237, for authority to cross the lane between Harris and Bernard streets with branch line, which commences at point 'A' on another proposed branch line,

across south shore False creek east of Westminster avenue, running to point 'B' on Burrard avenue, city of Vancouver, B.C. (Application 4338. Case 1000.)

Application dismissed.

1475. Application of the Vancouver, Westminster and Yukon Railway Company under section 237, for authority to cross over Parker street, with branch line, which commences at point 'A' on another proposed branch line across south shore of False creek, east of Westminster avenue, and running to a point 'B' on Burrard Inlet, city of Vancouver, B.C. (Application 4333. Case 994.)

Application dismissed.

1476. Application of the Vancouver, Westminster and Yukon Railway, under section 237, for crossing Westminster avenue by branch line from point 'A' on main line to point 'B' on company's property near Clark drive, in city of Vancouver, B.C. (Application 4316. Case 977.)

Application dismissed.

1477. Application of the Vancouver, Westminster and Yukon Railway, under section 237, for authority to cross Princess street, with branch line, which commences at point 'A' on another proposed branch line across south shore of False creek, east of Westminster avenue, and running to point 'B' on Burrard inlet, city of Vancouver, B.C. (Application 4323. Case 984.)

Application dismissed.

1478. Application of the Vancouver, Westminster and Yukon Railway, under section 237, for authority to cross Hastings street, with branch line, which commences at point 'A' on another proposed branch line across south shore of False creek, East Westminster avenue, and running to point 'B' on Burrard Inlet, city of Vancouver, B.C. (Application 4330. Case 991.)

Application dismissed.

1479. Application of the Vancouver, Westminster and Yukon Railway, under section 237, for authority to cross Keefer street, with branch which commences at point 'A' on another proposed branch line across south shore of False creek, east of Westminster avenue, and running to point 'B' on Burrard Inlet, city of Vancouver, B.C. (Application 4324. Case 985.)

Application dismissed.

1480. Application of the Vancouver, Westminster and Yukon Railway, under section 227, for authority to cross tracks of British Columbia Electric Railway at Venables street, with branch line which commences at point 'A' on another proposed branch line across south shore of False creek, east of Westminster avenue, and running to point 'B' on Burrard Inlet, city of Vancouver, B.C. (Application 4331. Case 992.)

Application dismissed.

1481. Application of the Vancouver, Westminster and Yukon Railway, under section 237, for authority to cross Venables street with branch line, which commences at point 'A' on another proposed branch line across south shore of False creek, east of Westminster avenue, and running to point 'B' on Burrard Inlet, city of Vancouver. (Application 4332. Case 993.)

Application dismissed.

1482. Application of the Vancouver, Westminster and Yukon Railway, under section No. 237, for authority to cross lane between Keefer and Princess streets, with branch line which commences at point 'A' on another proposed branch across south shore of False creek, east of Westminster avenue, and running to point 'B' on Burrard Inlet, city of Vancouver, B.C. (Application 4337. Case 999.)

Application dismissed.

1483. Application of the Vancouver, Westminster and Yukon Railway Company, under section 177 of the Railway Act, 1903, for an Order approving the place and

mode of crossing over the track of the British Columbia Electric Railway Company, Limited, on Powell street, in the city of Vancouver. (Application 3559. Case 275.)

Application dismissed.

1484. Application of the Vancouver, Westminster and Yukon Railway Company for approval of crossing by its branch line, which commences at point 'A' on another proposed branch line, across the south shore of False creek, east of Westminster avenue, and running to point 'B' on Burrard Inlet, over the lane between Hastings and Cordova streets, in the city of Vancouver, B.C. (Application 4327. Case 988.)

Application dismissed.

1485. Complaint of R. Robertson & Co., Vancouver, B.C., respecting freight rates of the Canadian Pacific Railway Company to Ladysmith, British Columbia, as covered by supplement 7 to C.R.C., No. W. 542, effective April 10, 1908. (Application 9308.)

Application dismissed.

1486. Complaint of the Trades and Labour Council, Vancouver, British Columbia, that the Canadian Pacific Railway Company is running its trains from Vancouver without proper inspection. (Application 8371.)

Application dismissed.

1488. Application of the Vancouver and Lulu Island Railway Company, for an Order authorizing a proposed deviation from plan of branch line on the south side of False Creek. (File 344.)

Dismissed.

1489. Complaint of the municipality of Burnaby and Coquitlam, B.C., regarding defective cattle guards on the line of the Vancouver, Westminster and Yukon Railway or the Vancouver, Victoria and Eastern Railway and Navigation Company. (File 1875).

Order that the Vancouver, Victoria and Eastern Company within four months replace all cattle guards upon their line with guards in accordance with the blue print upon the file.

1490. Complaint of the municipality of Burnaby regarding fares charged on certain portions of the British Columbia Electric Railway Company's Inter-urban line between Vancouver and New Westminster.

Withdrawn.

1491. Application of the Alaska Pacific Express Company for approval of its contract forms. (Application 4537. Case 1202.)

Judgment reserved.

1492. Application of the Vancouver Power Company, Limited, for an Order sanctioning the erection and maintenance of a line of wires for the conveyance of electric power across the tracks of the Canadian Pacific Railway Company at the Second Narrows, Burrard Inlet, Vancouver, B.C. (File 1746.)

Order to issue in terms of draft attached to file.

1493. Complaint of W. R. Austin alleging insufficient protection in the matter of cattle guards on the Canadian Pacific Railway in that district. (File 9436.)

Judgment reserved, to be considered with the general question.

1494. Complaint of Alister Thompson, Dewdney, B.C., regarding the unprotected track of the Canadian Pacific Railway Company at Dewdney, B.C. (Application 9883).

Stands to be dealt with after the disposition of question of a general Order of Board *re* cattle guards set down for hearing in Ottawa on 4th May, 1909.

1495. Complaint of Fred Allen, et all, regarding the extension of the railway siding now terminating at the western Boundary of the Pacific Coast Mill Company on Coal Harbour.

Application refused.

1496. Complaint of Mission District Board of Trade, Mission City, British Columbia, that railway company has not built new station promised last year. (Application 9259.)

Stands on statement of counsel that railway intends to go on with work as soon as weather is favourable.

1497. Complaints of Albert Milton against the Vancouver, Victoria and Eastern Railway and Navigation Company (18 in all). (File 9861. Case 4806.)

Order made directing Great Northern Railway Company to erect fences, construct swing gates and farm crossings. Work to be completed by 3rd May, 1909.

1498. Complaint of Mr. Kenworthy against the Canadian Pacific Railway Company regarding repairs to a dike at Dewdney, B.C. (Application 9862. Case 4807.)

Plans to be filed by applicant for approval; pending this being done, matter stands. Consent of the railway company to be obtained.

1499. Complaint of R. Hay, of Barnet, B.C., regarding damages for cattle killed on right of way of Canadian Pacific Railway Company. (File 9506.)

Dismissed, Board holding it has no jurisdiction.

1500. Complaints of Messrs. Murphy, McKenzie, Milton, Armstrong and Shannon regarding farm crossings, gates, fences and cattle guards on the Vancouver, Victoria and Eastern and Great Northern Railway at and near Cloverdale, B.C. (Application 9858. Case 4804.)

Order made directing Great Northern Railway Company to erect fences, construct swing gates and farm crossings—work to be completed by 3rd May, 1909.

1501. Complaint of Messrs. Shannon, Milton and Murphy against the New Westminster Southern and Great Northern Railway Companies regarding flood gates on the north side of Nicomekle river and on the east side of the railway track. (Application 9859. Case 4805.)

Order made as in previous file No. 9858, Case 4808.

1502. Complaint of Alexander F. Latts, of Port Moody, B.C., regarding damages for cow killed on the line of the Canadian Pacific Railway Company.

Application dismissed, no jurisdiction.

1503. Application of the Vancouver, Victoria and Eastern Railway and Navigation Company, for an order, under section 252 of the Railway Act, sanctioning the placing and maintaining of crossings over lot 23, Group 2, New Westminster District, B.C.

Application refused.

1504. Application of the city of Vancouver, under sections 256 and 257 of the Railway Act, for leave for the construction of a bridge for highway purposes over the tracks of the Canadian Pacific Railway Company at the intersection of the northerly shore of False Creek and Fourth avenue, Vancouver, British Columbia. (Application 9865. Case 4809.)

Application granted. Order issued.

1505. Complaint of H. T. Thrift of lack of accommodation for either passengers or freight at Hazelmere Station, B.C. (Application 9841.)

Judgment directing railway company to provide reasonable and proper facilities for public at Hazelmere. Formal Order not to issue for thirty days to allow time for Great Northern Railway Company to appeal on question of jurisdiction.

1506. Application on behalf of Mrs. H. M. Milsted for an Order that the Vancouver, Victoria and Eastern Railway and Navigation Company proceed immediately to construct fences along its right-of-way, on both sides, passing through lot 8, Abbottsford Townsite, New Westminster District, B.C., and the northeast quarter of section 15, township 16, New Westminster District, B.C., and along the highway adjoining said right-of-way on the southerly side thereof. (Application 9866. Case 4810.)

Order made directing railway company to construct proper fences with gates at farm crossings by 3rd April, 1909.

1507. Application of the Grand Trunk Railway, under sections 256 and 257, for Order approving of overhead farm crossing to be constructed at mile post 125·12 (between London and Windsor, lot 27, con. 3, township of London, on Anthony Dickie lands. (Application 1707. Case 1673.)

Order made granting application to construct bridge and approaches thereto for vehicular traffic at both ends and a separate one for cattle at north end and for purposes of a farm crossing over tracks of applicant company on farm of A. M. Dickie, Grand Trunk Railway, at its own expense to remove present crossing over Canadian Pacific Railway, and place at the point shown on plan. When the work is completed as set forth in the order, the applicant company to compensate Dickie for damage, if any, done to him by the raising of the bridge and the diversion of the main approach. Amount to be determined by agreement or arbitration under the provisions of the Railway Act. Bridge to be completed by October 7, 1909.

1508. Consideration of the question of protection of road crossing in the village of Dutton, Ontario, by the tracks of the Michigan Central and Père Marquette Railroad companies. (Application 9437. Case 4576.)

Order made that the crossing be protected by folding gates, to be installed by the Michigan Central Railroad Company by May 1, 1909. Gates to be operated between 7 a.m. and 7 p.m. daily, except on Saturdays, when to be operated until midnight. Cost of installing gates and erecting tower to be borne equally between the Michigan Central Railroad Company and the Père Marquette. The cost of maintenance and operation to be borne: 55 per cent by the Michigan Central Railroad Company, 25 per cent by the Père Marquette, 10 per cent by the village of Dutton, 10 per cent by the township of Dunwicke.

1509. Consideration of the protection of level crossing in the village of Rodney, Ontario, by the Michigan Central and Père Marquette Railroad Companies. (Application 9437. Case 4575.)

Order made that the crossing be protected by folding gates, to be installed by the Michigan Central Railroad Company by May 1, 1909. Gates to be operated between 7 a.m. and 7 p.m. daily except on Saturdays, when to be operated until midnight. Cost of installing gates and erecting tower to be borne equally between the Michigan Central Railroad Company and the Père Marquette Company. Cost of maintenance and operation to be borne: 55 per cent by the Michigan Central Railway, 25 per cent by the Père Marquette, 10 per cent by the village of Rodney, and 10 per cent by the township of Aldsborough.

1510. Accident on Michigan Central Railway at West Lorne, Ont., January 9, 1909.

Note.—This matter is set down for the purpose of considering the matter of protection at level crossing in the village of West Lorne, just east of the station. (Application 9415.)

Order made that the crossing be protected by folding gates, to be installed by the Michigan Central Railroad Company by May 1, 1909. Gates to be operated between 7 a.m. and 7 p.m. daily, except on Saturdays, when to be operated until midnight. Cost of installing gates and erecting tower to be borne equally between the Michigan Central Railroad Company and the Père Marquette Company. Cost of maintenance and operation to be borne: 55 per cent by the Michigan Central Railroad Company, 25 per cent by the Père Marquette, 10 per cent by the village of West Lorne, and 10 per cent by the township of Aldsborough.

1511. Complaint of the municipality of North Cowichan, B.C., per James Norcross, alleging dangerous condition of crossing at Duncan, British Columbia, and requesting that an automatic signal be provided. (Application 8142.)

Order made directing railway company to remove section foreman's house at crossing to a point at least 75 feet from its right of way by May 15, 1909.

1512. Application of the Pacific Coast Coal Company, Limited, and South Wellington Coal Mines, Limited, under section 250, for authority to lay a wooden box containing an air and steam pipe under tracks of the Esquimalt and Nanaimo Railway Company near South Wellington, on section 14, range 6, Cranberry District.

Application granted.

1513. Application of the Chief Commissioner of Lands and Works, province of British Columbia, under section 237, for an Order directing the Nicola, Kamloops and Similkameen Coal and Railway Company to improve all diversions and highway crossings between Spence's bridge and Nicola, B.C., particularly at point 28½ and 30½ miles from Spence's Bridge. (Application 7055. Case 3060.)

Order made that the Nicola, Kamloops and Similkameen Coal and Railway Company forthwith improve for the protection, safety and convenience of the public all diversions and encroachments upon the highway by the said company along its line of railway, between Spence's Bridge and the townsite of Nicola, and more particularly with reference to the diversions and encroachments upon the public highway at the points on its line of railway between the bridge of the company over the Nicola river, situated about 28½ miles from Spence's Bridge, and the eastern boundary of the railway belt, as directed and required by the Chief Engineer of the Department of Lands and Works of the province of British Columbia. Also that in the event of any dispute arising as to the compliance with the terms of the order or otherwise, the same shall be settled by the Board.

1514. Application of the Government of British Columbia, per John J. Fulton, Chief Commissioner of Land and Works, for an Order directing the railway company to construct suitable highway crossings, cattle guards, planking, cross fences, at Rupert street, Renfrew street, Angus road, and Nanaimo street, townsite of Hastings, British Columbia. (Application 8716.)

Order made that railway company at its own expense construct suitable highway crossings at Rupert street as soon as street is opened up and an overhead bridge not less than 20 feet wide at Nanaimo street as soon as street is opened up.

1515. Application of the Chief Commissioner of Lands and Works, province of British Columbia, under clause No. 237, for an Order directing the Esquimalt and Nanaimo Railway Company and the Wellington Colliery Company to provide suitable overhead crossing 1¼ miles from Ladysmith station, British Columbia. (Application 6682. Case 2827.)

Order made granting leave to applicant to construct highway bridge over the two railways near Ladysmith station, British Columbia. Cost to be divided as follows: one-half by Colliery Company, ¼ by Railway company, and ¼ by Government.

115*a*. Complaint of R. Carter, Courtney, B.C., respecting the freight and passenger rates on the Canadian Pacific Railway to Comox and Cumberland. (Application 4607. Case 1312.)

Application dismissed.

1516. Application by the solicitor for His Majesty's Attorney General for British Columbia in connection with the resolution of the Legislative Assembly of British Columbia for an Order placing British Columbia in the same and as favourable condition in respect to tolls for freight and passenger traffic over the Canadian Pacific Railway through British Columbia as are other portions of the Dominion of Canada over the main line of said railway. (Application 4747.)

Application fails. If applicant desires to give evidence for purpose of establishing that the rates now charged in British Columbia are unreasonably high or that discrimination exists, leave will be granted.

1517. Complaint of F. W. Logan, Provincial Dairy Commissioner, province of British Columbia, against express rates charged by Dominion Express Company and Canadian Pacific Railway on milk shipments in that province, also conditions imposed by Canadian Pacific Railway. (Application 5097.)

Stands to be considered after the general question of express rates is dealt with.

1518. Complaint of the Central Farmers' Institute of British Columbia, alleging inadequate protection afforded stock along the line of railways in British Columbia, with respect to cattle guards and the proper fencing of railway rights of way. (Application 9307.)

Stands to be disposed of after general question *re* cattle guards is dealt with at May, 1909, sittings of Board in Ottawa.

1519. Application of the Grand Trunk Pacific Railway Company, under section 178 of the Railway Act, for leave to take a right of way 200 feet in width across government lands between the east line of township 12, range 13, west 1st meridian, and the eastern boundary of the province of British Columbia. (Application 9085. Case 4343.)

Refused.

1520. Application of the Pacific Coast Coal Mines, Limited, under sections 222 and 227 of the Railway Act for authority to construct a spur, making connection between the tipple at South Wellington mine, situated in Cranberry district, Vancouver Island, and tracks of the Esquimalt and Nanaimo Railway Company. (Application 8902. Case 4212.)

After Bill No. 62 receives Royal assent the coal company to file plans for an under crossing of the Esquimalt and Nanaimo Railway when, if same approved by Board's engineer, order to go for crossing at the expense of the applicant.

1521. Application of the city of Victoria, for an Order to renew, rescind, or vary order No. 3731, and for an order under section 238 of the Railway Act that the Esquimalt and Nanaimo Railway Company submit to the Board a plan and profile of the railway at the place or point where the said line crosses the land known as the old Esquimalt road in Victoria west; and for an Order under section 237 of the Railway Act to construct a level crossing for vehicular traffic; and to remove the existing fences across the said highway. (File 5663. Case 2292.)

Leave granted to open the street in question across the railway. The railway company to do the necessary grading and planking for the crossing; city to maintain crossing when constructed. Formal order to issue when city furnishes evidence by affidavit that trees in question have been removed and that binding arrangements have been made that buildings will not be erected on the vacant lot referred to in evidence.

1522. Application of the Quamichan Mill Company for authority to construct a crossing over the tracks of the Esquimalt and Nanaimo Railway at a point 1½ miles north of Duncan, British Columbia. (File 9433. Case 4541.)

Application granted. In the terms of agreement between the parties.

1523. Complaint of Steve Huntley of Nokomis, Sask., that the Grand Trunk Pacific Railway Company has fenced the road allowance in such a way as to prevent him from obtaining easy access to a portion of his farm.

Stands to be heard at Ottawa.

1524. Application of the Honourable the Minister of Public Works of British Columbia for an Order directing the Canadian Pacific Railway Company to provide, construct, and maintain a suitable highway crossing at or near a point west of the Columbia river where the railway intersects the Eagle Pass, or at such other point as the Board may direct.

Order to go in terms of agreement.

1525. Application by G. E. & N. to construct spur in Victoria to Wilson & Company, Limited.

Granted. Engineer to report.

1526. Complaint by the Deputy Attorney General as to fires being caused by the Esquimalt and Nanaimo Railway Company during the summer months.

Reserved.

1527. Application of the St. Mary's and Western Railway, under sections 222 and 227, for authority to construct a spur across the tracks of the Grand Trunk Railway

to the premises of the J. D. Moore & Company, and D. Maxwell & Sons, St. Marys, Ontario. (Application 8814. Case 4154.)

Application granted. Order issued.

1528. Application of the Canadian Pacific Railway Company, under sections 222 and 237 of the Railway Act, for an Order authorizing the construction, maintenance and operation of a branch line of railway, or spur, in the city of Montreal, commencing from a point on the centre line of the most westerly track leading to the freight car repair shop of the said company, distant about 250 feet northerly from the northerly end of freight car shop, thence in a southwesterly and northwesterly direction across De Levis street to and into the premises of the Montreal Gas Company, now leased to the Montreal Light, Heat and Power Company, situate on Cadastral lot 159 in the Hochelaga ward of the city of Montreal, a distance of about 1,780 feet, together with another siding about 550 feet in length. (Adjourned hearing.) (Application 8152. Case 3708.)

Application granted. Order issued.

1529. Application of the Niagara, St. Catharines and Toronto Railway Company, under section 227 of the Railway Act, for an order granting the company authority to connect its tracks with the tracks of the Toronto, Hamilton and Buffalo Railway Company in lot 27, con. 6, township of Crowland, county of Welland, Ont. (Application 8838. Case 4176.)

Application granted. Order issued.

1530. Application of the Grand Trunk Railway Company, under section 29, for under section 227 of the Railway Act, for an Order granting the company authority to derails on each side of the crossing of the Grand Trunk tracks on Charlotte street, Peterborough, Ont. (Application 650. Case 3464.)

Application granted. Order issued.

1531. Application of the Canadian Northern Ontario Railway Company under section 237 of the Railway Act, for authority to construct its line of railway acrosss certain highways in the township of Gloucester, county of Carleton, between mileage 48·27 and 54·6 west from Hawkesbury, Ontario. (Application 8770. Case 4122.)

Application granted. Order issued.

1532. Application of the National Board of Trade, under sections 269 and 284 for the adoption by the Board of regulations (*a*) prohibiting the practice of spitting in railway cars, railway stations and waiting rooms except in proper receptacles prepared for the purpose, and (*b*) requiring the railway companies to properly clean and disinfect railway cars, station and waiting rooms in order to prohibit the dissemination of tuberculosis or other infectious diseases. (Application 1708. Case 4502.)

(Next case numbered 1534, as one case was stricken out.)

1534. Complaint of the Royal Northwest Mounted Police, *re* alleged 'dangerous highway crossing of the Calgary and Edmonton Railway (Canadian Pacific Railway) range 27, mile 25·5, town of Claresholm, Alberta. (Application 8696.)

Order made that railway company put the crossing between townships 11 and 12 in proper condition, also widen the partial diversion on the northeast quarter of section 36, township 11, range 27 and leave granted company to expropriate lands for such purpose.

1535. Application of the town of Claresholm, Alberta, under section 186 of the Railway Act, 1893, for an Order directing the Canadian Pacific Railway to provide and construct a suitable highway crossing where the company's railway intersects Third avenue, in the centre of the said town of Claresholm, Alberta. (Application 3783. Case 499.)

Order made that applicant at its own expense secure lots 15, 16 and 17 or parts thereof and do necessary grading for said street through block 'B' up to west side of Canadian Pacific yards.

1536. Application of the Canadian Pacific Railway, under section No. 167 of the Railway Act, for an Order authorizing diversions in its Crowsnest branch between Peigan and Crowsnest, Alberta. (Application 6902. Case 2951.)

NOTE.—This application is set down for consideration of the complaint of the towns of Cowley, Pincher Creek, Burmiss and Blairmore, Alberta, with respect of this diversion.

Order made amending order No. 6251 as follows:—

New townsite of Cowley to be located on northeast corner of section 17, west side of track, applicant company granted leave to expropriate lands necessary for a new townsite.

Applicant company to adjust with owners of present lots in Cowley location of their holds in the new townsite, and if that cannot be worked out to the satisfaction of owners and applicant company within six months from date, all, if any, of such owners and the company to have leave to apply to the Board to adjust differences.

All matters between village council, owners and company, that cannot be decided amicably reserved for disposition by the Board.

That the proposed site of the new station at Blairmore, be submitted to the Village Council of Blairmore before being approved of by Board.

Leave granted to the company to expropriate all lands required for new locations of stations of Pritchard Creek and Blairmore.

1537. Application of the Canadian Pacific Railway, under section 29 of the Railway Act, to amend the Order of the Board dated February 3, 1908, made upon the application of the Northwest Jobbing and Commission Company, for an Order under section 226 of the Railway Act, directing the Canadian Pacific Railway, the Alberta Railroad and Irrigation Company, or both of the said companies, to construct and provide a suitable branch or spur from the line of one of the said companies, or from the lines used jointly by them in their yards in the city of Lethbridge, province of Alberta, to the warehouse of the applicant company, in the said city, according to the plan on file with the board under case No. 460, file No. 3955, so as to vary the location of the said spur line and define the method of construction thereof, and directing the said Northwest Jobbing and Commisison Company to pay into court an amount sufficient to cover the cost of the said spur if constructed in accordance with this application. (Application 3955. Case 3583.)

Order made amending order 4353, by striking out the operative part of said order and placing thereafter the following clause:—

That the Pacific Company be, and is hereby directed to construct, maintain and operate a branch line of railway or spur from a point marked 'R' on the present freight spur; thence curving across Baroness road to the east side of Smith street; thence along Smith street to the north side of Dufferin street; in the city of Lethbridge, province of Alberta, a distance of fourteen hundred and forty-five feet, as shown in yellow, to the north side of Redpath street, and in red from the north side of Redpath street to the north side of Dufferin street, on the plan on file with the Board under case No. 3583, File 3955, which is hereby approved.

1538. Peition of the local union of the United Mineworkers Board of Trade and storekeepers, of Taber, Alberta, complaining against the freight rates of the Canadian Pacific Railway on coal shipments.

Also alleged failure of the Canadian Pacific Railway to supply an adequate number of cars for the movement of coal traffic. (Application 8626. Case 4036.)

Application dismissed.

1539. Complaint of the Alberta Farmers' Association and the Carston Board of Trade respecting freight, passenger and express rates charge on the Alberta Railway and Irrigation Company to and from Cardston, Alberta. Also alleged non-billing and posting of tariffs at station in accordance with Railway Act. (Application 3744.)

Stands for judgment, referred to chief traffic officer for a report.

1540. Complaint of F. W. Godsall, of Cowley, Alberta, respecting passenger rates on the Canadian Pacific steamers between ports of call on the Kootenay and Arrow lakes, B.C. (Application 5889.)

Application dismissed.

1541. Complaint of J. G. Swinney, Cowley, Alberta, alleging excessive express rates charged by Dominion Express Company on milk from Cowley, Alberta, to Michel, British Columbia. (Application 4870.)

Application dismissed.

1542. Complaint of F. W. Godsall, Cowley, Alberta, alleging excessive express rates between Winnipeg and Cowley. (Application 4896.)

Application dismissed.

1543. Application Edmonton Board of Trade *re* use of lignite coal on locomotives.

Reserved.

1544. Petition of the residents of Westbank, British Columbia, requesting that the Canadian Pacific Railway Company's steamers deliver mail and passengers at least three times a week at their wharf, Hall's Landing. (Application 7307.)

Application dismissed.

1545. Application of the city of Revelstoke, British Columbia, that the Canadian Pacific Railway be asked to make arrangements towards the construction of a bridge for traffic in connection with proposed new railway bridge across the Columbia River at Revelstoke, British Columbia. (Application 3885.)

Application dismissed.

1546. Complaint of R. G. Sidley, of Sidley, British Columbia, that the Vancouver, Victoria and Eastern Railway is discriminating in favour of the United States towns in regard to railway facilities in British Columbia. (Application 5039.)

Application dismissed.

1547. Complaint of the Columbia Flouring Mills Company, Ltd., Enderby, British Columbia, against the Canadian Pacific Railway, alleging they are not complying with section 236 of the Railway Act, with respect to company's rails where they cross Mill street, town of Enderby, British Columbia. (Application 9172.)

Judgment reserved, to look into the question as to whether Mill street is a highway or not. Application subsequently granted.

1548. Application of the Vancouver, Victoria and Eastern Railway, under section No. 222, for authority to construct a branch line to connect main line with the international boundary near Myncaster, district of Yale. (Application 5369. Case 1981.)

Application dismissed.

1549. Application of the city of Grand Forks, British Columbia, under section 29, for an Order varying Order of the Board, dated 23rd October, 1907, granting leave to the K. V. R. Ry. to cross Main street, city of Grand Forks. (Application 5736. Case 2343.)

Application granted.

1550. Application of the city of Grand Forks, British Columbia, under section 29, for an Order varying Order of the Board, dated 23rd October, 1907, granting leave to the K. V. R. Ry. to cross Bridge street, city of Grand Forks, British Columbia. (Application 5743. Case 2334.)

Application granted. Order issuer.

1551. Application of the city of Grand Forks, British Columbia, under section 29, for an Order varying Order of the Board, dated 23rd October, 1907, granting leave to the K. V. R. Ry. to cross Winnipeg avenue, city of Grand Forks, British Columbia. (Application 5741. Case 2345.)

Application granted. Order issuer.

1552. Application of the city of Grand Forks, under section 29, for Order varying Order of the Board, dated 23rd October, 1907, granting leave to K. R. V. Ry. to cross

Victoria avenue, city of Grand Forks, British Columbia. (Application 5737. Case 2346.)

Application granted. Order issued.

1553. Application of the city of Grand Forks, British Columbia, under section 29, for an Order varying Order of the Board, dated 23rd October, 1907, granting leave to Kettle River Valley Railway to cross Fifth street in the city of Grand Forks, B.C. (Application 5739. Case 2348.)

Application granted. Order issued.

1554. Application of the city of Grand Forks, British Columbia, under section 29, for Order varying Order of Board, dated October 23, 1907, granting leave to the Kettle River Valley Railway to cross Alexandra avenue, city of Grand Forks, British Columbia. (Application 5740. Case 2349.)

Application granted. Order issued.

1555. Application on behalf of the city of Grand Forks. British Columbia, under section 29, for Order varying Order of the Board, dated October 23, 1907, granting leave to Kettle River Valley Railway to crosss Sixth street, city of Grand Forks, British Columbia. (Application 5742. Case 2350.)

Application granted. Order issued.

1556. Application of the city of Grand Forks, British Columbia, under sections 229, 274 and 275 of the Railway Act for Order directing Columbia and Western Railway Company to adopt a signal service at its crossing of Riverside avenue, city of Grand Forks, British Columbia. (Application 9141. Case 4435.)

Order made for installation of electric bell by company at its expense, one half cost of maintenance to be borne by the city; speed limit of ten miles an hour.

1557. Complaint of the Board of Trade of Greenwood, British Columbia, alleging irregularity in freight and passenger rates on the Victoria, Vancouver and Eastern Railway, involving unjust discrimination against British Columbia points on the V. V. & E. Ry., in favour of points in State of Washington. (Application 9264.)

Application refused.

1558. Complaint of the Vernon Fruit Company of Vernon, British Columbia, alleging excessive freight rates charged by the Canadian Pacific Railway on fruit shipments from Peachland to Victoria, British Columbia, also against the minimum carload weight on such shipments. (Application 8911.)

Application withdrawn.

1559. Complaint of the Fruitvale Fruit Growers Association, against condition of fences, station accommodation for handling of freight and express on the Great Northern Railway at Fruitvale, British Columbia, also request that the railway company appoint an agent at that point. (Application 8868.)

Order made for erection of station and freight shed within one month. Local parties to furnish wire and put same on telegraph posts after railway company; the latter to put an in the station. Connection at Salmo.

1560. Consideration of the terms of Order No. 2115, November 16, 1906, respecting interwitching charges at Rossland, British Columbia, as between the Red Mountain Railway and the Columbia and Western Railway Companies. (Application 5.)

Judgment reserved.

1561. Application of the Board of Trade of Nelson, British Columbia, respecting freight rates on the Canadian Pacific Railway to and from that point. (Application 5664.)

Application dismissed.

1562. Complaint of F. W. Godsall, Cowley, Alberta, against alleged delay by the Canadian Pacific Railway Company in running of trains between Cowley and Nelson. (Application 4896.)

Application dismissed.

1563. Application of Frank Miller, Columbia, British Columbia, for an Order directing the Kettle River Valley Railway Company to provide a crossing or bridge in front of his residence, Columbia, British Columbia. (Application 2283.)

Application withdrawn upon railway company undertaking to put in crossing.

1564. Application of the Canada Zinc Company, Limited, for authority to cross the Canadian Pacific Railway Company's (Proctor branch) tracks with transmission wires near Station, B.C., 76, one mile from Nelson, British Columbia. (Application 7556. Case 3297.)

Upon affidavit being filed within thirty days by applicant that poles have been protected to satisfaction of the railway company order to go, otherwise application refused.

1565. Application of the Hasting Exploration Syndicate, Limited, for a station agent at Erie, British Columbia, on the line of the Nelson and Fort Sheppard Railway.

Application withdrawn.

1566. Complaints of the Okanagan Board of Trade regarding freight rates on fruit.

Application withdrawn.

1567. Complaint of Robert Robson of Mayook, British Columbia, alleging poor train service on the Canadian Pacific Railway on the Crown West branch from Mayook to Cranbrook, British Columbia.

Application withdrawn.

1568. Complaint of A. E. Watts that railway companies do not comply with Provincial or Dominion Acts of Parliament in the matter of keeping their right of ways clear of inflammable material.

Application withdrawn.

1569. Complaint of A. E. Watts that no station accommodation of any kind is provided by the Canadian Pacific Railway Company for passengers or freight at Wattsburg, and that the Dominion Express Company has refused to deliver goods at Wattsburg.

Order made that railway company file plans within two months, and upon approval to erect station at Wattsburg within four months from date of Order.

1570. Complaint of the Cranbrook Fernie Farmers' Institute that cattle guards on the line of the Canadian Pacific Railway Company are totally inadequate for the protection of cattle and other stock. (Application 9848, Case 4879).

Stands pending consideration of a general Order regarding cattle guards, &c.

1571. Application of the Cranbrook-Fernie Farmers' Institute for an order to compel the Canadian Pacific and other railway companies to re-open and restore certain public roads they have destroyed, obstructed and obliterated wherever such roads are required for use by the public in British Columbia. (File 9848. Case 4878).

Stands for judgment, the company undertaking to investigate as to the obstructions (if any), and report as to the same.

1572. Petition of the Legislative Assembly of Manitoba, asking that railways operating in the province of Manitoba be required to pay demmurrage in all cases where such companies are not able or fail to furnish cars within one week after being ordered, said demurrage to be at the same rate per day as charged by railway companies when a car is not loaded in a given time after being placed at a loading platform or elevator, and to be deducted from the freight rate. (Application 4235.)

Stands until next sittings of Board in Winnipeg at the request of Attorney General for province of Manitoba.

1573. Application of the city of Winnipeg, Manitoba, for an order directing the Canadian Pacific Railway Company to remove its tracks from McPhillips street, Winnipeg, Manitoba. (Application 2050).

Stands at request of all parties pending the making of a formal agreement between the city of Winnipeg and the Canadian Pacific Railway Company. Copy to be filed with Board.

1574. Application of the city of Winnipeg for an Order approving of the plans of the Salter street bridge across the tracks of the Canadian Pacific Railway Company at Winnipeg, Manitoba. (File 3084.)

Stands at request of all parties pending the making of a formal agreement between the city of Winnipeg and Canadian Pacific Railway Company Copy to be filed with Board.

1575. Application of M. McGregor of Eagleton, P.O. (Tilston, Manitoba), for a semi-weekly mail service by train instead of by stage or mail carrier system; for an Order that an agent be placed at the station in question, and for an Order directing the Canadian Pacific Railway Company to rename the town of 'Eagleton.'

Application dismissed.

1576. Complaint of M. McGregor, of Tilston, Manitoba, on behalf of the farmers and citizens of that town against the poor service of the Canadian Pacific Railway between Lauder and Tilston, Manitoba. (Application 9125.)

Application dismissed.

1577. Application of the Kemp Manufacturing Company and Winnipeg Ceiling and Roofing Company for an Order directing the railway companies to equalize their freight rates on metallic shingles and sidings from eastern points to Manitoba, Saskatchewan and Alberta, as against the freight rates on the manufactured products. (Application 4756. Case 1460.)

Judgment reserved.

1578. Complaint of John Kerr of Franklin, Manitoba, regarding freight rates on vegetables shipped from Franklin to Winnipeg. (Application 9796.)

Stands for judgment.

1579. Petition of residents of Broderick, Sask., for an appointment of an agent by the Canadian Pacific Railway Company at that point. (File 9479.)

Stands for judgment. Company to file statement of earnings at station in question.

1580. Complaint of London Fence Company regarding the crossing of Broadway street, Portage la Prairie, Manitoba, by the tracks of the Canadian Northern Railway Company. (Application 6255.)

Judgment of Board that agreement between the complainant and railway company should be carried out. Railway consents to pay expense of hydrant if city extends water main.

1581. Complaint of Union of Manitoba Municipalities requiring cattle guards on the various railroads in Manitoba. (Application 9818.)

Stands for consideration of general question.

1582. Petition of settlers in the vicinity of the Thunder Hill branch of the Canadian Northern Railway for an Order compelling the Canadian Northern Railway to operate its line and siding about 18 miles west of Benito.

Application dismissed.

1583. Complaint of J. F. Wilson, of Dana, Sask., for damages for cattle killed on the Canadian Northern Railway right of way through section 23, township 38, range 26, west second meridian, also through S. E. quarter section 22, township 38, range 26, west second meridian.

Application dismissed, no jurisdiction.

1584. Application of the town of Dauphin, Manitoba, to have Vermilion street opened across the right of way of the Canadian Northern Railway Company. (Application 9798. Case 4783.)

Order made that railway company permit public to use the crossing at Vermilion street on condition that no objection be raised to westbound trains reasonably obstructing Dartmoor street and eastbound trains Vermilion street.

1585. Application of the Rat Portage Lumber Company, Ltd., for an Order, under sections 314, 318, 321 and 323 of the Railway Act, for an Order directing the Canadian Northern Railway Company to reduce its toll for carrying saw logs from the Rainy River and points adjacent thereto to the mills of the applicant company.

Application disposed of except as to the rate (if any) to be charged for shunting on railway company's spur to Rat Portage Lumber Company's mill.

1586. Application of D. A. Ross for an order compelling the Canadian Northern Railway Company to accept freight for shipment on its Bird's Hill branch.

Application withdrawn.

1587. Complaint of J. J. Powell regarding the dangerous crossing between mile post 244 and 245 on the main line of the Canadian Northern Railway, Winnipeg to Edmonton. (Application 9437. Case 4628.)

Referred to the Board's engineer to report.

1588. Application of Local Improvement District 26-B-4 for an Order directing the Canadian Northern Railway Company to make level crossings on road allowances in township 50, range 3, west of the 4th meridian. (Application 9513. Case 4634.)

Order to go for railway company to put in crossings in accordance with the regulations.

1589. Complaint of the Prince Albert Board of Trade that the new joint commodity tariff of the Canadian Northern Railway Company and the Canadian Pacific Railway Company to British Columbia points is unsatisfactory and for a repayment to shippers of all amounts paid in excess of the rates applied to Prince Albert prior to the transfer of the Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company. (Application 6945.)

Application dismissed.

1590. Application of the Board of Trade of Redvers, Sask., for a station and facilities at point on the line of Canadian Pacific Railway Company. (Application 9872.)

Order made directing railway company to provide and maintain a station at Redvers, known as its No. 5 standard plan, to be completed by 1st September, 1909.

1591. Application of the Canada West Coal Company, Ltd., for authority to construct tunnel under the tracks of the Canadian Pacific Railway where the same cross the Crowsnest branch on the south half of section 31, township 9, range 16, west 4th meridian, at Taber, Alberta.

Application dismissed.

1592. Application of Edward D. Coffey *et al,* for an Order directing the Canadian Northern Railway Company to put into immediate and continous operation its line of railway from Etoimami to The Pas.

Application dismissed.

1593. Complaint of the Rev. William Stocker, of Elkhorn, Manitoba, *re* condition of Canadian Pacific Railway station at Elkhorn. (Application 9681.)

Reported upon by Board's inspector. Company has undertaken to see that the grounds for the complaint are removed.

1594. Application of the Bell Telephone Company, under section 248 of the Railway Act, for leave to exercise its power in the construction, maintenance and operation of its line of telephone under a part of Fortiefiation Land and Victoria square within the limits of the city of Montreal, province of Quebec. (Application 9648. Case 4682.)

Application granted. Order issued.

1595. Consideration of the question of protection of highway crossing at King street, Sherbrooke, province of Quebec, by the Canadian Pacific Railway. (Application 9437. Case 4708.)

No Order made as railway company assured Board that it had decided to remove its passenger station to another point which will do away with necessity of any regular train crossing the highway in question.

1596. Application of the corporation of the city of Sherbrooke, province of Quebec, for an Order requiring the Grand Trunk Railway Company to remove additional track laid across King street and discontinue shunting their cars across the said King street.

The question of protection will also be considered by the Board in this connection. (Application 2267. Case 1436.)

Stands until after June 1, 1909, to give railway company an opportunity to relieve the inconvenience complained of by such steps as it deems necessary.

1597. Consideration of the question of protection of the level crossing by the Canadian Pacific Railway Company and the Grand Trunk Railway at College street, Lennoxville, province of Quebec. (Application 419. Case 842.)

Board ordered folding gates to be installed by the Canadian Pacific and Grand Trunk Railway companies for protection of the Canadian Pacific Railway crossing and Boston and Maine, and Grand Trunk Railway crossings. Gates to be operated from a tower on Canadian Pacific Railway property and to be operated day and night. Cost of construction to be borne equally by the three railway companies. Cost of maintenance to be borne 5-12 by Grand Trunk Railway Company, 3-12 by Boston and Maine, 3-12 by Canadian Pacific Railway Company, 1-12 by the village of Lennoxville. Gates to be installed by 19th July, 1909.

APPENDIX D.

SUMMARY OF THE PRINCIPAL JUDGMENTS DELIVERED BY THE BOARD FROM FEBRUARY 1, 1904, TO MARCH 31, 1908.

The towns of Port Arthur and Fort William v. The Bell Telephone Company and the Canadian Pacific Railway Company.

The municipalities of these towns owned and operated a joint telephone system within the limits of the two towns, and applied to the Board under section 193 of the Railway Act, 1903, for an order directing the Canadian Pacific Railway Company to allow the installation of telephone instruments on the premises and in the railway stations of the company to connect with the municipalities' exchange.

In May, 1902, and prior to the enactment of section 193, an agreement was made between the railway company and the Bell Telephone Company, under which the telephone company, for valuable consideration, was granted, for a period of ten years, the exclusive privilege of placing telephone instruments, apparatus and wires in the several stations, offices and premises of the Railway Company in Canada, where the telephone company had established, or might, during the continuance of the agreement, establish telephone exchanges.

Hearing at Ottawa, February 16 and 29, 1904.

Judgment of Board, March 15, 1904.

Held, per Blair, Chief Commissioner (3 Can. Ry. Cas., p. 205): That the said agreement was valid and not void or voidable as being in restraint of trade or against public policy, and that an order under section 193 should provide for payment of compensation upon just terms for all lawful rights and interests injuriously affected thereby.

Per Bernier, Deputy Chief Commissioner: While the agreement is valid and compensation should therefore be allowed, the question of compensation should be reserved for future consideration and determined after hearing any case that might be presented by the Canadian Pacific or any other railway company in support of damages.

Per Mills, Commissioner: That the agreement is in restraint of trade and against public policy, and that compensation should be awarded only for the use of the premises occupied by the municipalities' telephones, and the expense of operating them.

Order suspended pending further argument as to the question of compensation.

Upon questions of law the opinion of the Chief Commissioner prevails.—Section 10 of Railway Act, 1903.

A further hearing of this application on the question of compensation was had at Ottawa, October 12, 1904.

Judgment July 14, 1905.

Killam, Chief Commissioner (4 Can. Ry. Cas., p. 279): Held, adopting the former judgment of a majority of the Board.

Compensation should be made to the railway company for the use of its stations and the interference with its property consequent upon such installation.

Compensation should also be made to the telephone company for the loss of the exclusive privilege of telephone connection with such stations.

The effect on the exclusive agreement between the telephone company and the railway company of installing such a municipal telephone system must be determined by the law of the province of Quebec where the contract was made.

The installation of such a municipal system would not of itself rescind the exclusive contract between the telephone company and the railway company. At most its only effect would be to give the injured party a right to have the contract rescinded. Quebec Civil Code, Art. 1065, Dupuis v. Dupuis, R. 72 R. 19 S.C. 500.

The evidence does not furnish a satisfactory basis of determining the compensation to be paid by the municipalities, and suggestions are made as to its ascertainment hereafter by the board or by arbitration.

Payment of such compensation, or the giving of proper security therefor, to both companies, should be a condition precedent to the installation of the system in each town.

Leave was given to state a case for the opinion of the Supreme Court whether the installation of the municipal system entitles the telephone company to a rescission of its contract with the railway company.

In the matter of the Shore Line Railway.

Complaint was made to the Board that the Shore Line Railway, running between the city of St. John and the town of St. Stephen, in New Brunswick, was unsafe for traffic. The board caused its inspecting engineer to make an examination of the said line of railway, and upon his report, made an order forbidding the running of trains, cars or engines over the railway between certain points named. Against this decision and order a protest was made on behalf of the New Brunswick Southern Railway Company, the company now operating what was and is still known as the 'Shore Line Railway,' upon the ground that the Board had no jurisdiction or authority to direct or enforce the stoppage of trains or the operations of said railway.

The undertaking of the Shore Line Railway Company was, by Act of the Parliament of Canada, chapter 63 of 58-59 Victoria, declared to be a work for the general advantage of Canada, and that Act provided that the Railway Act of Canada should apply to the company and its undertaking instead of the laws of the province of New Brunswick and the Railway Act of that province.

Later, the Shore Line Company defaulted in the payment of its bonds. Proceedings were taken in the courts of New Brunswick, as a result of which the railway was subsequently sold, and the sale was followed by an Act of the New Brunswick Legislature, chapter 74, 1 Edward VII., incorporating the New Brunswick Southern Railway Company for the purpose of acquiring, holding and operating all or any part of the Shore Line Railway; and also all the capital stock, bonds, rights, franchises, powers and privileges, and properties of the said Shore Line Railway; and by chapter 102 of 3 Edward VII., an Act of the said legislature was passed confirming the deed of conveyance of the property and franchises of the Shore Line Company to the New Brunswick Southern Railway Company.

Judgment June 7, 1904.

Blair, Chief Commissioner (3 Can. Ry. Cas., p. 277).

A railway company incorporated under the laws of a provincial legislature, whose undertaking is afterwards declared to be a work for the general advantage of Canada, is subject to the exclusive control of the Parliament of Canada and the Railway Act applies. No provincial legislature can restore control, legislatively speaking, to the provincial legislature.

Duthie v. The Grand Trunk Railway Company.

This was an application by J. H. Duthie of Toronto, against the Grand Trunk Railway Company for relief on account of its action in detaining three cars loaded with coal at Belleville to enforce payment of charges for demurrage on car service.

and, in default of payment, disposing of the coal by private sale and applying the proceeds in payment of the freight and storage charges.

Hearing at Ottawa, June 27, 1905.

Judgment, August 24, 1905.

Killam, Chief Commissioner (4 Can. Ry. Cas., 305):

The Board of Railway Commissioners is a judicial, as well as an executive body, created to enforce the railway legislation of the Dominion Parliament, but not to supplant or supplement the provincial courts in the exercise of their ordinary jurisdiction. In making orders and regulations under sections 23 and 25 of the Act the board is not to adjudicate in respect to rights arising out of past transactions, but to lay down rules for future conduct. The board is not empowered to award damages or any other relief for any injury caused by an infraction of the Act, e.g., section 214.

Held, that any claim for damages for premature or improvident sale should be prosecuted by action in the provincial courts.

By the tariff of tolls approved by the Governor in Council under the Railway Act of 1888, railway companies were authorized to charge higher tolls than by a special tariff filed under the Act of 1903, which specifically provided for car service or demurrage charges. The latter were also recognized by the classification rules authorized by the Board and in force at the time in question.

Held, that the company not having sought to charge the maximum tolls approved by the Governor in Council (of the nature of a standard tariff) must be understood as having accepted the goods for carriage at lowest rates conditional upon its right to make a charge for demurrage.

Held, that the rate charged was *prima facie* reasonable and that no order should be made against the railway company.

Re Car Service Rules.

Numerous complaints and objections were presented to the Board respecting charges made by railway companies for demurrage or delay in the loading or unloading of car by shippers or consignees, and the rules governing such charges.

The practice of railway companies, before the constitution of the Board, was to charge lower tolls on goods in carload lots than for less quantities. This practice was sanctioned by the freight classification and has been followed in the tariffs authorized by the Railway Act, 1903.

It appears to the Board to be reasonable that railway companies which delivered cars to, or placed them at the disposal of, shippers or consignees, for loading or unloading, should have some means of limiting the time to be occupied in such loading and unloading, and should be authorized to impose a reasonable additional toll on traffic carried at carload rates for any detention or use of the cars or continued occupation of their tracks, beyond such time as would be reasonably required for loading or unloading. It was felt, too, to be important in the public interest as securing the fullest possible use of railway cars, tracks and equipment, that such delays should be discouraged.

With this object in view, and after giving every opportunity which was reasonably possible to the various interests affected to be heard upon the subject, the Board, by order dated January 25, 1906, abolished and disallowed all tolls or charges theretofore charged or imposed by any railway company subject to its jurisdiction, for delay in, or additional time used in, the loading or unloading of cars, whether under the name of demurrage car rental, or car service, or otherwise, and all rules regulating the same, substituting therefor the tolls and rules set out at length in the order. (See Appendix H.)

Said order, and the rules therein set forth, came into force and took effect the first day of March, 1906.

The Sydenham Glass Company v. the Grand Trunk Railway Company, Canadian Pacific Railway Company, Lake Erie and Detroit River Railroad Company, Wabash Railway Company, Michigan Central Railroad Company, and the Hamilton, Toronto and Buffalo Railway Company.

This was an application by the Sydenham Glass Company for lower special rates than the special rates agreed to by the railways interested, and which applied on shipments of glassware, bottles, and lamp chimneys from Wallaceburg, Ontario, on the line of the Père Marquette Railway Company to Toronto, Hamilton, Berlin, London, Ontario, and to Montreal, Quebec.

The original application covered the commodities named both in carload and less than carload lots, but on the hearing it was announced on behalf of the applicants that the application would be restricted to bottles in carloads.

Hearing at Toronto, June 20, 1904.

Judgment of Board, July 30, 1904.

Per Blair, Chief Commissioner (3 Can. Ry. Cas., p. 409):

Bottles in carloads were formerly carried from Wallaceburg to Toronto, Hamilton, Berlin and Montreal at special rates less than the regular basis of fifth class Upon the Railway Act coming into force on February 1, 1904, these special rates were increased.

It appeared that at the present rates the Glass Company cannot maintain its position in the home market against foreign competition:—

Held, that the rates should be reduced to the following scale, viz.: to London, 8 cents; to Toronto, Hamilton and Berlin, 13 cents; to Montreal, 23½ cents.

Scobell v. Kingston and Pembroke Railway Company.

Complaint alleged (1) that discriminative rates were imposed on the transportation of cedar lumber, railway ties and poles of all kinds made from cedar, and used for railway purposes; (2) that unreasonable and excessive rates were imposed on the transportation of the telegraph, telephone and trolley poles as compared with rates on lumber, &c.

Hearing at Ottawa, April 23, 1904.

Judgment of Board, July 30, 1904.

Per Blair, Chief Commissioner (2 Can. Ry. Cas., p. 412).

It appeared that an increase had been made in the rates on cedar products without any material change in the rate on common lumber and similar products. This increase was made by the railway company to retard the shipment of cedar products required for its own use.

Held, a discrimination within the meaning of s. 253, s.s. 2,—the railway company ordered to cease from levying rates on cedar products in excess of the rates on other descriptions of lumber and their products. 'Common carriers in making rates cannot arrange them from an exclusive regard to their own interests, but must have respect to the interest of those who may have occasion to employ their services, and must subordinate their own interests to the rules of relative equality and justice.' (Reynolds v. Western N. Y. R. W. Co., 1 I.C. Rep. 685.)

The Sutherland-Innes Company and the Wallaceburg Cooperage Company v. the Père Marquette, Michigan Central, Wabash, Grand Trunk, and Canadian Pacific Railway companies.

This was a complaint against the increase of rates by the railways named on cooperage stock between points in eastern Canada, and more especially to the increase from Wallaceburg and other western Ontario points to Montreal for local delivery and for exports.

Hearing at Toronto, June 20 and 23, 1904.

Judgment of Board, July 30, 1904.

Per Blair, Chief Commissioner (2 Can. Ry. Cas., p. 412):

Held, that rates on cooperage stock should not exceed rates on common lumber according to the mileage lumber tariffs of the railways, but such rates when specially reduced on account of water competition, &c., need not necessarily apply to cooperage stock. From points in western Ontario to Montreal, the maximum rate for local delivery was fixed upon the evidence at 16½ cents, and for export, including 'terminal,' at 18 cents per hundred pounds.

Tower Oiled Clothing Company's case.

Application by the Tower Oiled Clothing Company, of Toronto, for a carload rating on oiled clothing, shipped in carload lots.

It appeared that carload shipments had been made from Toronto to Halifax for fishermen's use, and it was alleged that shipments might also be made to the Canadian Northwest for ranchers' use if the application were granted.

Hearing at Toronto, June 28, 1904.

Judgment of Board, July 30, 1904.

Blair, Chief Commissioner (3 Can. Ry. Cas., p. 417):

Held, that although the discrimination involved in the difference between C. L. and L. C. L. rating has received tacit assent, a shipper has not thereby the right to demand a lower rate on carloads, unless possibly he can show that the carload rate demanded would pay reasonably for the service and that a refusal would injure his business. Upon the evidence a third-class rate for carloads of not less than 20,000 pounds from Toronto to Halifax, Winnipeg and Calgary and other points reached by applicants was ordered.

The United Factories (Limited) v. The Grand Trunk Railway Company.

Complaint alleged that a rate of 3 cents per 100 lbs. on logs from Penetanguishene to Newmarket, which the railway company had maintained for a number of years, from 1895 to November, 16, 1903, conditional that the product of the logs should be delivered for carriage to the Grand Trunk Company, was, on November, 16, 1903, increased to 4 cents per 100 lbs., but subject to the same condition.

Hearing at Ottawa, April 28 and May 6, 1904.

Judgment of Board, October 10, 1904.

Per Blair, Chief Commissioner (3 Can. Ry. Cas., p. 424):

Held, that since the increased rate is neither unjust, unreasonable nor contrary to some provision of the Railway Act, the application must be refused.

Re The Canadian Freight Association and Industrial Corporations.

This was an application by the Canadian Freight Association, on behalf of all the railways in Canada, under subsection 4 of section 275 of the Railway Act, 1903, for permission to make concessions from the current rates on material for construction and machinery for equipment of new industrial plants.

Certain of the railway companies, members of the Association, had been in the habit of granting a reduction of 25 per cent on the rates on such material, &c.

Judgment, October 10, 1904, refusing application.

Blair, Chief Commissioner (3 Can. Ry. Cas., p. 427):

That although the Board is prepared to give due effect to subsection 4 of section 275 of the Act, it must have a separate and distinct application in such case, so as to judge of the effect of its order upon other industries, shippers and dealers.

Ontario Fruit Growers' Association v. Canadian Pacific Railway Company et al.

Complaints alleged (1) unreasonable and excessive freight rates on fruits and (2) that the charge for icing in transit were too great.

Hearing at Toronto, June 21, 23 and 24, 1904.

By agreement between complainants and the railway companies, the following modifications were made in the classification:—

(*a*) Apples in boxes less than carloads, from 2nd to 3rd class.

(*b*) Pears in boxes and barrels, L.C.L., from 1st to 3rd class, and in carloads from 3rd to 5th class.

Also the following commodity rates:—

(*c*) On fresh fruits (small), from the fruit districts to points in Eastern Ontario, Quebec, and the maritime provinces, fresh fruit shall be carried at 4th class rates in carloads of not less than 20,000 lbs. instead of 3rd class rates, and at 2nd class rates in L.C.L. of 10,000 lbs. and over instead of 1st class rates.

(*d*) And from points in Ontario and Quebec to Winnipeg, Portage la Prairie and Brandon, a fourth-class rates in carloads of not less than 20,000 pounds, instead of third class.

Approved by Board.

Judgment October 10, 1904.

Blair, Chief Commissioner (3 Can. Ry. Cas., p. 430):

Held, that the present system of making fixed charges for icing cars, irrespective of the actual cost of such service, is not based on sound principle, and must be discontinued; that the actual cost of the ice and the placing thereof in the cars should not be exceeded. Pending a decision of the Board upon further consideration as to a reasonable charge, a charge of not more than $2.50 per ton of 2,000 pounds on the actual weight of the ice supplied was, in this instance, authorized.

The Pea Millers' Association v. Canadian Railway Companies.

The Pea Millers' Association complained that the railways charged higher rates from Ontario milling points to the sea-board on split peas for export than they charged on other grain products, such as flour and rolled oats for export.

Split peas for export were formerly carried upon the flour basis. The advance complained of commenced in October, 1902, and was made apparently under pressure. The McMorran Company, of Port Huron, complained to the Interstate Commerce Commission that Canadian railways were carrying split peas for export at the grain product rate, while it had to pay the higher rate of the Michigan roads.

The Michigan railroads opposed any reduction in their rates, and the result was that the rate advanced on the Grand Trunk and other railways in Canada.

Hearing at Ottawa.

Judgment of Board, October 10, 1904.

Per Blair, Chief Commissioner (3 Can. Ry. Cas., p. 433):

That the former basis of rates must be restored.

In re application of the Grand Trunk Railway Company for permission to make reduced rates on coal used for manufacturing purposes.

This was an application by the Grand Trunk Railway Company, under subsection 4, section 275, of the Railway Act, for authority to continue a difference in the rate of freight on bituminous coal of ten cents per ton between certain points on its line of railway, such reduced rates being in favour of the manufacturer as compared with that charged to the dealer or consumer.

The applicant company had been in the habit of allowing a rate of 80 cents per net ton on bituminous coal used for manufacturing purposes at Cobourg, carried from the Niagara frontier to Cobourg while the usual and customary rate was 90 cents on coal carried between the same points for other shippers and used for domestic purposes.

The company justified the difference in the rate on the ground that certain manufacturers in Cobourg would be unable to pay the higher rate and carry on business successfully.

Judgment, October 10, 1904.

Blair, Chief Commissioner (3 Can. Ry. Cas., p. 438):

That no evidence has been offered to sustain this claim; but even if proved, the reduction could not be allowed. The allowance of a reduction in the freight rate on any article of merchandise to one class of shippers, and the refusal of the same rate to another class, is unjust discrimination, and forbidden by section 252.

(Castle v. B. & O. R. W. Co., 8 I. C. Rep., 333, approved.)

The Almonte Knitting Company v. the Canadian Pacific Railway Company and the Michigan Central Railroad Company.

The Almonte Knitting Company complained that the rates on coal to Almonte from the Niagara and Detroit frontiers were unreasonably high as compared with the rates to Carleton Junction, Ottawa, and adjacent stations. The rate to Carleton Junction, Ottawa, and adjacent stations is $2 per ton from the Niagara frontier, and $2.25 from Detroit, while the rate to Almonte is 40 cents higher, points on the lateral line from Carleton Junction being charged an arbitrary rate above the rate to Carleton Junction.

Hearing at Toronto, June 28, 1904.

Judgment of Board, October 10, 1904.

Blair, Chief Commissioner (3 Can. Ry. Cas., p. 441):

Under certain conditions rates to a point on a branch or lateral line may be higher than to points on the main line, though at a less distance from the junction point; but such rates must not be unreasonable or disproportionately higher than to nearer points on the main line.

Held, that the circumstances warrant a higher rate to Almonte than to Carleton Junction and Ottawa; but as the arbitrary rate to Almonte on 10th class traffic was only 1 cent per 100 pounds (20 cents per ton) it must not be exceeded on coal between the same points.

Re metallic shingles.

This was a complaint by the Canadian Manufacturers' Association objecting to the approval by the Board of the Canadian Freight Classification No. 12, which, among other changes and additions, advanced metallic shingles from 7th to 5th class in carloads.

This classification No. 12 was issued by the railway companies in 1903, and superseded all previous classifications. It had never been approved by order in council, but was provisionally sanctioned by order of the Board of July 16, 1904, pending consideration of some of the objections raised.

From January 1, 1884, when the first Canadian joint freight classification was issued, until November 1, 1884, none of these commodities were specially classified; but, on a later date, a circular was issued by the railway companies making certain changes and additions by which, among other things, they placed metallic shingles in packages as L.C.L. 3, C.L. 5. This rating continued in force until March 1, 1888, when a reduction of one class was made, namely to L.C.L. 4 C.L. 6.

In May, 1890, a further reduction was made on carloads, and until March, 1901, the classification stood at L.C.L. 4, C.L. 7.

In March, 1901, the rating was placed at L.C.L. 4, C.L. 5.

The complainants set up that these goods were in the 7th class for over ten years; that the change was never sanctioned by order in council; that no substantial reason had been shown for the advance; and that the retention of the previous classification was necessary in order to enable the complainants to compete on fair terms with wooden shingles, siding, &c.

The railway companies claimed that the former classification was a mistake: that the proper class in which to place such commodities was the 5th class; that the plate, which is the raw material used in the manufacture of these articles, was in the 5th class; and that it was both unreasonable and unfair to the railway companies to place the manufactured article in a class for which the rates are lower than those upon the raw material from which the article is made; and, also, that articles of the 7th class were then carried at lower rates than those at which articles of that class were carried when these particular commodities were in the 7th class, and that they should not be obliged to lower their rates on these goods.

Hearings at Toronto, June 23, 24 and 28, 1904.

Judgment. June 29, 1905.

Killam, Chief Commissioner: Held. that the reasonable and fair course would be to establish for the articles commodity rates equal to those at which they were carried immediately before the change of classification in March, 1900.

Re St. Pierre & Company and Temiscouata Railway Company.

This was a complaint by George St. Pierre & Co., of Fraserville, Que., alleging that the Temiscouata Railway Company was unjustly discriminating against the complainants in the matter of its freight rates, and applying for an order directing the railway company to revise and lower its freight rates.

Hearing at Rivière du Loup, April 19, 1905.

Judgment, July 5, 1905.

Killam, Chief Commissioner: The rates charged by the Temiscouata Railway Company were not unreasonable in view of the nature of the country which the railway traversed and of its traffic.

The standard freight tariff of the company was identical with the standard tariffs of the Grand Trunk Railway Company, the Canadian Pacific Railway Company, the Canada Atlantic Railway Company, and most of the other railways in the provinces of Ontario and Quebec, and the same, also, as that of the Intercolonial Railway between its stations west of Lévis.

The rates charged in the special tariff filed by the Temiscouata Railway Company on various commodities such as are authorized by section 260, subsection 2, of the Railway Act, compared favourably with the joint tariffs on the same commodities issued by the Grand Trunk Railway Company and the Canadian Pacific Railway Company, in the province of Quebec, except such rates as were rendered necessary by competitive conditions and which did not prevail on the Temiscouata Railway.

The Temiscouata Railway Company had no special commodity tariff for grain and grain products in carloads.

Held, that in accordance with the common practice of other railway companies and in the interest of lumber camps upon or near its line, the Temiscouata Railway Company should prepare such a tariff on an equitable basis.

It appeared that the Temiscouata Railway Company had, previous to July, 1904, a proportional tariff on various classes of goods (according to the Canadian freight classification from Rivière du Loup and Edmundston, on through shipments from

points beyond, and it now charges on this through business its full standard rates as on strictly local business, except on some traffic to Edmundston.

Held, that the company should state its reasons for withdrawing this proportional tariff, and on what grounds, if any, it objected to restoring it.

The Brant Milling Company v. the Grand Trunk Railway Company.

This was an application by the Brant Milling Company for an order 'allowing and instructing the Grand Trunk Railway Company to continue' an allowance heretofore made by the railway company for the cost of cartage on flour and feed shipped from the company's mill out of Portland and Montreal and other points in the eastern part of Canada.

The allowance was withdrawn after the Railway Act, 1903, came into force, and it was claimed that its continuance was necessary to the existence of the applicant's business.

Hearing at Brantford, April 26, 1904.

Judgment, July 13, 1905.

Killam, Chief Commissioner (4 Can. Ry. Cas., p. 259).

The Railway Act, 1903, requires equality in the tolls charged under substantially similar circumstances, and forbids discrimination between individuals, persons, companies and localities. Sec. 252.

No variation from the authorized tariffs of tolls can be made unless under circumstances or conditions specially provided for in such tariffs or by special tariffs of general application and not discriminating between different localities. Secs. 261, 262.

Held, that the application either for a continuance of the allowance previously made, or for a change in the authorized tariffs of tolls, in favour of the applicant alone, must fail.

Manufacturers' Coal Rate Case, 3 Can. Ry. Cas. 438 referred to; Stone v. Detroit, &c., 3 I. C. Rep. 613; Hazel Milling Company v. St. Louis, &c., 5 I. C. Rep. 57; *re* division of joint rates, 10 I. C. Rep. 681, followed.

Coal Rates Midland to Orillia.

Complaint of F. W. Grant alleging that the rates on coal from Midland to Orillia, Ont., charged by the Grand Trunk Railway Company, are excessive as compared with the rates from Suspension Bridge, Ont., to the same point.

Hearing at Ottawa, June 8, 1905.

Judgment, September 4, 1905.

Killam, Chief Commissioner: The Board has found great want of uniformity in the rates charged by railway companies for the carriage of coal for short distances, and proposes to ascertain, if possible, whether this want of uniformity is unreasonable, or whether some attempt should be made to harmonize the rates for similar distances. In the meantime, as the rate charged by the Grand Trunk Company for the carriage of coal from Midland to Orillia is not, in itself, an unreasonable rate, the Board will not interfere.

Rates on stone from Stonewall and neighbouring points to Winnipeg.

This was a complaint by E. Williams & Co., A. Patterson & Co., Irwin & Son, and the Winnipeg Supply Company, alleging that the Canadian Pacific Railway Company, by increasing the rate on rubble and crushed stone from the complainants' quarries at Stonewall to Winnipeg from 2¾ cents per hundred pounds to 3 cents per hundred pounds, while continuing the rate of 2¾ cents to the Stony Mountain

quarrymen, was unjustly discriminating against the complainants, and applying for an order (*a*) directing the railway company to restore the former rate of 2¾ cents from the complainants' quarries, or (*b*) fixing some other rate as a uniform rate from all the quarries on the Teulon branch.

Hearing at Winnipeg, September 13, 1905.

Judgment, November 23, 1905.

Killam, Chief Commissioner: In view of the facts that the traffic from Stonewall was carried for many years at the lower rate; that the railway company itself made its first rate from Gunton to Winnipeg the same, and that a promise had been made by the second vice-president of the company to some of the complainants that the 2¾ cents rate from Rockspur to Winnipeg would be protected, the Board was of opinion that that rate was a reasonable one. That opinion was strengthened by reference to the rate of 2½ cents per 100 pounds charged by the same railway company for carriage of similar traffic from Milton, Campbellford, Credit Forks, Schaw and Orangeville to Toronto, at distances varying from 33 to 49 miles. (Stonewall is 20 miles, Rockspur 34 miles from Winnipeg.) The question of the propriety of the rates from Stony Mountain to Winnipeg should not now be considered.

Held, that a higher rate than 2¾ cents from Gunton, Rockspur and Stonewall was unreasonable, and that an order would go directing the disallowance of the 3 cent rate and the restoration of the 2¾ cent rate.

The Niagara, St. Catharines and Toronto Railway Company v. the Grand Trunk Railway Company.

This was an application by the Niagara, St. Catharines and Toronto Railway Company, under section 177 of the Railway Act, 1903, which empowers the Board to order that a junction may be made of the tracks of one company with the tracks of another company, upon such terms, at such places, and in such manner as the Board may determine, to intersect with its line the railway of the Grand Trunk Railway Company, called the Allanburg branch line or cut-off, to form a junction with the Grand Trunk Allanburg branch line at Stamford.

The evidence disclosed the fact that an agreement had been entered into between the Grand Trunk Company and the Wabash Railroad Company—the application was, in fact, a joint one by the Niagara, St. Catharines and Toronto and the Wabash Company—under which the Grand Trunk Railway granted the Wabash Company the joint user in common with itself of the Allanburg branch for a term of twenty-five years, and that the Wabash Company was then in use and possession of the said Allanburg branch jointly with the Grand Trunk Company upon the terms and conditions contained in the memorandum of agreement.

Hearing at Ottawa, March 8, 1904.

Judgment, April 5, 1904, granting order applied for.

Blair, Chief Commissioner (3 Can. Ry. Cas., p. 256):

The object of the Railway Act (sections 177, 253 and 271) is to insure that all reasonable and proper facilities for the handling, forwarding and interchange of traffic shall be afforded to the shipping public. For this purpose the Board may, without the sanction and against the will of a railway company, permit a junction to be made with its line by another railway where in the opinion of the Board such junction is reasonably necessary in the public interest and in the interest of traffic in the district through which the railway passes. The parties to a lease of a railway cannot by stipulation between themselves restrict the powers or discretion of the Board to authorize such a junction.

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The Niagara, St. Catharines and Toronto Railway Company v. the Grand Trunk Railway Company.

Application by the Niagara, St. Catharines and Toronto Railway Company to rescind an order of the Railway Committee of the Privy Council, approving of the place of crossing by the branch line of the Grand Trunk Company's main line at Merritton to the paper and cotton mills in that village, of the main track of the Niagara, St. Catharines and Toronto Railway.

It was alleged in support of the application that the conditions imposed upon the Grand Trunk Railway Company, and upon which that company was allowed to make the crossing, had not been complied with—that the Grand Trunk Railway Company has not paid, but has refused to pay compensation for the lands of the applicant company which are occupied by the crossing and with its switches and sidings by the Grand Trunk Company under the said order of the Railway Committee.

Hearings at Ottawa, March 11 and 22, 1904.

Judgment, April 5, 1904.—Application refused.

Blair, Chief Commissioner (3 Can. Ry. Cas., p. 263):

Where two railway companies differ as to the nature and extent of the protection prescribed by an order of the Railway Committee to be furnished at a crossing of two railways and one company voluntarily provides the additional protection which it claims the other company should supply according to the terms of such order, the Board will not, by an *ex post facto* order, direct the payment by the other company of the expenditure thereby incurred, and in default of payment order that the crossing be discontinued. In such cases the proper course is to apply to the court for an interpretation of the order.

The order of the Railway Committee directed that an interlocking signal system and all the necessary works and appliances for properly operating the same be provided at such crossing.

Held, that derails do not form part of the appliances required by such order, and a permanent watchman is not necessarily required.

Compensation is not allowed (1) for the use of the land of the senior company occupied by the crossing tracks of the junior company where no substantial injury is done to the lands of the senior company; nor (2) for interference with the business of the senior company, or for any other delays in the use of its railways due to precautions taken in the use of the crossing required for public safety. (S. 177, Railway Act, 1903.)

City of Toronto v. The Grand Trunk Railway Company and the Canadian Pacific Railway Company.

This was an application to the Railway Committee of the Privy Council made in June, 1900, by the city of Toronto for an order to authorize and ratify the construction and maintenance of the overhead bridge adjoining York street, in the city of Toronto, and crossing overhead the railway tracks on the Esplanade, and directing the terms as between the city and the two railway companies according to which the costs of the works were to be borne by the respective parties, pursuant to secs. 187 and 188 of the Railway Act, 1888.

The construction of this bridge, known as the York street bridge, was provided for by the 7th and 8th clauses of the Esplanade tripartite agreement, dated July 26, 1892, confirmed by Dominion statute 55 and 56 Vic., chap. 48.

The application not having been disposed of before the Railway Act, 1903, came into force, was heard by the Board on May 27, 1904.

By the said Esplanade agreement, the Canadian Pacific Railway Company agreed to build a highway over the tracks of the railway companies—the portion of

the cost to be borne by each to be settled by arbitration or paid equally by the C.P.R. and the city, in case the Grand Trunk Railway was found to be exempt from, or entitled to, indemnity against liability for any portion of the cost.

The rights of the Grand Trunk Railway as to such exemption or indemnity were, by the agreement, to be decided by the submission to the court of a special case between the city and the Grand Trunk Railway.

After the bridge was built, and while an action brought by the city against the railway companies, in lieu of the special case, was pending, this application was made

Judgment, August 19, 1904.

Blair, Chief Commissioner (4 Can. Ry. Cas., p. 62):

Application refused, the question involved not being of a public nature, but the settlement of a dispute of a private nature, which the parties, by their agreement, had left to be settled by the courts.

(The Merritton Crossing Case, 3 Can. Ry. Cas., 263, followed.)

James Bay Railway Company v. Grand Trunk Railway Company.

This was an application by the James Bay Railway Company, under section 177 of the Railway Act, 1903, for leave to place its tracks across the tracks of the Midland Division of the Grand Trunk Railway Company at a point near Beaverton, in the township of Mara, Ontario.

At the time the application was made and for several years previous thereto, the Grand Trunk Railway Company had a single track at the proposed point of crossing, and up to the time of the hearing that company had never suggested that it intended to lay down any other than the one track.

The matter was heard at Ottawa on August 29, 1905, and an order issued as of that date authorizing an undercrossing at the point named. The order provided that for the purpose of the crossing the Grand Trunk Railway should, at the expense of the James Bay Company, raise its tracks for such distance on each side of the crossing as the chief engineer of the Board should consider necessary to provide a proper grade and to such height (not exceeding two feet) over the then level of the tracks as the chief engineer should require. The order also provided that the masonry work of the undercrossing should be sufficient to allow of the construction of an additional track by the Grand Trunk Railway Company.

From this order the James Bay Company appealed to the Supreme Court of Canada on the question whether, under section 177 of the Railway Act, 1903, or otherwise, the Board had jurisdiction to make the order, in so far as it directed the masonry work of the undercrossing to be sufficient to allow of the construction of an additional track on the line of the Grand Trunk Railway Company.

Appeal dismissed: 37 S.C.R. 372.

Later, by petition, dated May 8, 1906, the James Bay Railway Company appealed to His Excellency the Governor General in Council, under subsection 2 of section 44 of the Railway Act, 1903, to vary the said order of August 29, 1905, by striking out the provisions requiring the James Bay Company to provide for a second track of the Grand Trunk Railway Company.

This petition was also dismissed by order of the Privy Council, dated May 31, 1906.

Preston and Berlin Street Railway Company v. the Grand Trunk Railway Company.

This was an application by the Preston and Berlin Street Railway Company, under section 177 of the Railway Act, 1903, for leave to cross the tracks of the Grand Trunk Railway Company at Caroline and Erb streets, in the town of Waterloo, Ontario.

In order to avoid the crossings applied for it was suggested at the hearing, on behalf of the town, that the Board should exercise the power it was alleged to possess under section 187 of the Act, and direct the Grand Trunk Railway Company to move its tracks so as to allow sufficient space for the running of the applicant company's line between Mr. Seagram's property and the line of the Grand Trunk Railway.

Hearing at Toronto, November 7, 1905.

Judgment, Killam, Chief Commissioner: The application to be dealt with at the present time is simply one to allow the two crossings at Caroline and Erb streets, and in the public interests the application must be refused. The Preston and Berlin Railway Company previously applied to the Board for leave to use a small portion of the Grand Trunk Railway Company's land in order to dispense with the crossing. The company was incorporated solely under the provincial laws, and the provision in the Railway Act giving the Board power to authorize the use by one company of the railway tracks or the land of another, applies only to a railway within the authority of the Board, authorized by Act of the Dominion Parliament, or a work declared to be for the general advantage of Canada.

The suggestion that the Board attempt to exercise a power to compel the railway company, which already had a crossing over the streets, to move that crossing, not for the protection of the public, but as a matter of convenience to another railway, might be worthy of some consideration, but does not arise on the present application.

The town might succeed in an application to have the tracks of the Grand Trunk Railway Company moved and have the highway extended so as to cover the land of the Grand Trunk between the corner of the Seagram building and the tracks and a portion of it that is not already a highway. I would not say what view the Board would take of it, nor how far it could be done with safety apart from the question of its being a proper exercise of the power under that section 187 that has been referred to. If the town wishes to do that they should make an application.

Later the application was renewed at the town of Waterloo, after the Board had an opportunity of examining the locality.

Judgment, Chief Commissioner: The Board finds that the inspection recently made of the locality has only confirmed its previous view that the crossings ought not to be allowed to be made; that the only apparent reason for such crossings is to enable the electric railway company to use property on which it desires to have its terminal station and yard, and that the Board does not consider this a sufficient reason for adding these two additional crossings so close together, and upon such a curve, to the other sources of danger in Waterloo; that the fact that the railway company has chosen to so locate its terminal property, or that the council of the town of Waterloo is unwilling to allow the electric railway company to place its tracks on other streets does not seem sufficient to force the Board, in the exercise of the discretion conferred upon it by law, to a different conclusion than that which it deems proper in the public interest; that the Board regrets that the Grand Trunk Railway Company does not see fit to allow the electric railway company sufficient space for the running of its cars between Mr. Seagram's property and the line of the Grand Trunk Railway, but that the Board finds that it has no authority to compel the Grand Trunk Railway Company to allow the Preston and Berlin Company the use of any portion of the land of the Grand Trunk Railway Company.

This being so, any change in the line of the Grand Trunk Railway Company at the street crossings would be of no benefit to the Preston and Berlin Company.

Chatham, Wallaceburg and Lake Erie Railway Company v. Canadian Pacific Railway Company.

This was an application by the Chatham, Wallaceburg and Lake Erie Railway Company, under section 177 of the Railway Act, 1903, for leave to cross the tracks

of the Canadian Pacific Railway Company, lessee of the Ontario and Quebec Railway Company, at William and Raleigh streets, in the city of Chatham, Ontario.

By agreement made in 1888 between the town of Chatham and the Ontario and Quebec Railway Company, the company agreed to maintain on two streets gates and watchmen where the railway crosses the highway, and to permit crossings to be made over four streets by the Chatham Street Railway Company and such other companies or corporations as the town might from time to time authorize to construct and run street railways in Chatham.

By by-law of the city of Chatham passed in 1905, the Chatham, Wallaceburg and Lake Erie Railway Company (incorporated by Act of Parliament of Canada, 3 Edw. VII., ch. 105) was authorized to lay down and construct a street railway in Chatham and was given extensive privileges of running passenger and freight cars by electric power on certain streets, including those crossed by the Ontario and Quebec Railway Company.

Hearing at Chatham, December 7, 1905.

Judgment, Killam, Chief Commissioner (5 Can. Ry. Cas., p. 175):

Held, that the applicants, although possessing greater powers than an ordinary street railway company, came within the terms of the agreement of 1888 as being a company authorized to construct and run a street railway in Chatham.

Held, also, that the consent of the railway company in the agreement of 1888, to permit crossings for street railway purposes did not amount to a consent to permit crossings for all purposes, nor require it to bear the cost of any extra precaution necessary in consequence of a street railway or other railway being built across its line, and that the extra expense incurred ought to be borne by the applicants.

City of Ottawa v. the Canada Atlantic Railway Company and Ottawa Electric Railway Company.

This was an application by the city of Ottawa, made on October 8, 1903, to the Railway Committee of the Privy Council for an order directing the construction by the Canada Atlantic Railway Company of a subway under its tracks on Bank street and apportioning the cost of such work between the Canada Atlantic Railway Company and the Ottawa Electric Company. The application was transferred to the Board after the coming into force of the Railway Act, 1903.

The Ottawa Electric Railway Company, whose undertaking was declared by the Parliament of Canada a work for the general advantage of Canada, was authorized by order of the Railway Committee of the Privy Council, to cross the tracks of the Canada Atlantic Railway Company on Bank street, and by agreement the expense of protecting the crossing was borne equally between the two companies.

By an agreement dated June 20, 1893, between the city of Ottawa and the Ottawa Electric Railway Company, provision was made for the construction and operation of the works of the company over certain streets (including Bank street) of the city of Ottawa for a period of thirty years from the date of agreement. Under this agreement the company was obliged to pay the city annually the sum of $450 per mile of street occupied by its tracks for the first fifteen years, and the sum of $500 per mile thereafter.

By another clause in the agreement the company undertakes to pay $1,000 per mile on streets which are permanently paved. The agreement also provides that in the event of the city desiring to alter the grade of any street, it shall be entitled to do so without being liable to the company for any damage which it might sustain by reason of the interruption of traffic.

Hearing at Ottawa, April 11, 1905.

Judgment, July 13, 1905. Per Killam, Chief Commissioner (5 Can. Ry. Case, p. 127):

Held, that the city corporation should contribute equally with the steam railway company to the cost of the work.

Also, that the Electric Street Railway Company should likewise contribute to the cost of the work.

Ordered, that the cost of construction of the subway, including compensation for land damages, be borne by the parties in the following proportions: three-eighths by the city corporation, three-eighths by the steam railway company, one-quarter by the Electric Street Railway Company.

Leave was granted by the Board on the application of the Ottawa Electric Railway Company to appeal to the Supreme Court of Canada from its order upon the following questions of law:—

1. Whether by reason of the terms of the agreement between the Ottawa Electric Railway Company and the city of Ottawa, dated June 28, 1893, the Ottawa Electric Railway should have been ordered to contribute to the cost of the work thereby ordered to be constructed.

2. Whether the Ottawa Electric Railway Company was entitled under said agreement, to have the city of Ottawa furnish to the Ottawa Electric Railway Company, for the use of the said company in the exercise of its running powers, a street or highway known as Bank street, including that portion of the said street where it is crossed by the tracks of the Canada Atlantic Railway Company (either with the existing grade or with a changed grade as proposed), upon terms as to payment or compensation as laid down in the said agreement, and whether if such was the effect of the said agreement, the Ottawa Electric Railway Company should have been ordered to contribute to the cost of the work, thereby ordered to be constructed.

Held, that the electric company was a company 'interested or affected' in or by the said work within the meaning of section 47 of the Railway Act, 1903, and could properly be ordered to contribute to the cost thereof (37 S.C.R. 354).

Re Canadian Pacific Railway Company's branch east of the Don, Toronto.

This was an application by the Canadian Pacific Railway Company, as lessees of the Ontario and Quebec Railway Company, under section 175 of the Railway Act, 1903, for authority to construct a branch line of railway along the east side of the river Don, in the city of Toronto.

Hearing at Toronto, April 27, 1905.

Judgment, August 15, 1905, refusing application.

Killam, Chief Commissioner: It was not shown to the satisfaction of the Board that such a branch was 'necessary in the public interest, or for the purpose of giving facilities to business,' as required by subsection 4 of section 175 of the Railway Act, 1903.

The legislature had committed the interests of that part of the city, in a large measure, to the civic authorities. The Board felt that it should not interfere with the exercise of their discretion except for grave reason, and that it should be left largely to them to decide whether any, or what, railway company should be allowed to construct a branch in that neighbourhood.

It did not necessarily follow that authority would be given to any company chosen by the city. but the fact that the city agreed to the building of such a line would tend to establish its importance, and the city's choice would have great weight provided the terms appeared to the Board to properly safeguard the interests of other railway companies as well as those of the public.

Grand Trunk Pacific Railway Company v. Canadian Pacific Railway.

The Grand Trunk Pacific Railway applied under section 123 of the Railway Act, 1903, for an order approving the location of a section of the main line of its railway from Portage la Prairie to the Little Saskatchewan river, in Manitoba.

The route map was approved by the Minister of Railways, as required under section 122 of the Railway Act, 1903, and by the Governor in Council.

It was objected on behalf of the Canadian Pacific Railway Company that the continuation of the proposed location of the applicant company's line to the boundary between Manitoba and the province of Saskatchewan would be within a very short distance, 9 or 10 miles, of the Pheasant Hills and Manitoba and Northwestern branches of the Canadian Pacific Railway Company, which was contrary to the intent and purpose of parliament as indicated by the Act incorporating the applicant company, which required the applicant company to keep a distance of approximately 30 miles from other roads, and which involved, therefore, a very important question of law, namely, as to the true construction and interpretation of the incorporating Act, and upon which the Board might desire the opinion of the Supreme Court.

Hearing at Ottawa, September 4, 1905.

Judgment, September 4, 1905.

Killam, Chief Commissioner: It does not seem to me that there is any question of law involved in this case. The company obtained a special Act authorizing it to build a line of railway between certain points. Parliament has authorized that to be done, and it is not for this Board to say that it shall not be done.

The Railway Act, which by its terms is to be read as one with the special Act, requires the approval by the minister of the route of the railway. After the minister has approved it, the route is to be deemed the route that the railway is to follow, and it cannot be altered except by the minister himself. The Board has no arbitrary power to refuse to accept location plans which have been approved by the minister. After such approval the proper attitude for the Board to assume is to consider that there is a company empowered by parliament to construct a railway upon the route so approved. The Board has no right to say that the line shall not be built on that route. It must treat the location plans merely as plans of a part of the line according to that route located, and all it can say is as to whether the detailed location along that route shall be adopted or shall not.

There might be reasons why it should vary this a little one way or the other and still conform to the general route the minister has authorized.

Although the Board should be very chary about questioning the minister's view, still it might not be found approving that location if it believed that the minister had taken a wrong view of the law, and that he had no power to authorize or sanction the route under the special Act of the railway company. A question of that kind is raised here. There is, to my mind, however, no doubt whatever that the Grand Trunk Pacific Company has authority to build on the route that has been chosen, and that the minister has authority to sanction that route.

The company is by its Act given power to build railways from Moncton to the Pacific coast and certain points are specified through which it has to pass. The minister would be bound by this.

The clause referred to as creating a limitation as to the route in the Northwest Territories does not bind the Governor in Council to anything as a matter of law. In the first place, it requires the location to be approved by the Governor in Council, and it says that he is to have regard to a certain principle; that he shall have regard to that principle except for the purpose of reaching common points. There is one exception. Then it says, or for other satisfactory reasons. That leaves it open to the Governor in Council to say what are the satisfactory reasons. It says further that such location shall, as far as practicable (another exception), be constructed at such distance, generally not less than thirty miles from any other main line of railway, as the Governor in Council may deem reasonable. There is no limitation, in fact, as to the thirty miles. It is a suggestion thrown out by which the Governor in Council may, to a certain extent, feel himself bound to act. The very fact that some portion of the line is picked out, and certain considerations are pointed out to guide in the

approval of that particular location, would indicate that the rest of the route is left open, as it would be to any other railway company under the general Railway Act, and its special Act, when the latter has no particular limitation as to route.

Held, that there is not sufficient in the question of law raised to cause the Board to submit the question to the Supreme Court before acting in the usual way, and that the orders should issue approving the plans.

Application of the Grand Trunk Railway Company, under section 139 of the Railway Act, 1903, for authority to take certain additional lands lying north of the Esplanade and between Yonge and York streets, in the city of Toronto, and for the settlement of the minutes of the order therein.

On April 19, 1904, an extensive fire took place in the business portion of the city of Toronto. On May 4, 1904, before proceedings had been taken by any land-owner to rebuild, this application, which included a portion of the burnt property, was made. A further application, covering more of the burnt property, was afterwards made on August 10, 1904.

The application was in the terms of the statute, to permit the applicants to expropriate the lands burnt over and other lands..... for the purpose of the 'convenient accommodation of the public and the traffic on its railway.' The result of the application was that none of the owners affected had completed any work on the ground looking towards a restoration of the buildings which had been burnt.

Two important points raised at the hearing were:—

First, as to the jurisdiction of the Board. It was claimed that sufficient ground was not laid, under section 139 of the Railway Act, to enable the Board to entertain the application.

Secondly, as to the question of compensation to those interested in the land proposed to be taken.

Hearings, May 26, July 22, December 9, 1904, and January 5, 1905, at Ottawa, and December 22 and 23, 1904, at Toronto.

Judgment, February 23, 1905.

Killam, Chief Commissioner (4 Can. Ry. Cas., p. 290):

The Board may consider not merely the traffic coming to the station on the railway of the applicants immediately or from a distance, but also future traffic on the railway and the future accommodation of the public.

In dealing with the question of compensation, the Board may require the applicants to do any act whatever, including the payment of money, in addition to the compensation ordinarily allowed under the statute, but any such additional compensation should be allowed only under very peculier circumstances.

Held, that compensation should not be paid to the owners for business losses sustained since the fire and during proceedings taken before the Board for leave to expropriate, but interest from the date of the original application for such leave was allowed.

Bernier, Deputy Chief Commissioner (dissenting): The principles upon which compensation should be allowed are fixed by the Railway Act, and the Board has no power to order payment of compensation for any other damage than that which the statute allows in the ordinary case of expropriating lands under the Railway Act.

Mills, Commissioner (dissenting): That compensation can be allowed under section 139, for business losses sustained while an application for leave to expropriate is pending, and that this was a proper case for allowing damages for such losses.

SESSIONAL PAPER No. 20c

In re Grand Trunk Railway Company and cities of St. Henri and Ste. Cunégonde.

The Grand Trunk Railway Company applied for authority to expropriate, for the purpose of yard room, land owned by the cities of St. Henri and Ste. Cunégonde, in the province of Quebec.

Hearing at Ottawa, February 14, and at Montreal, February 22, 1905.

Judgment, May 2, 1905.

Killam, Chief Commissioner (4 Can. Ry. Cas., p. 277):

Under sections 118 and 139 of the Railway Act, 1903, railway companies may expropriate the lands of municipal corporations used by them for municipal purposes.

Reid v. the Canada Atlantic Railway Company.

This was an application under section 186 of the Railway Act, 1903, by a private individual, to compel the Canada Atlantic Railway Company to make and maintain highway crossings over or under the line of railway at points adjoining lands of the applicant, and was based upon an alleged agreement between the applicant and the railway company, claimed to have been made by Mr. J. R. Booth on behalf of the railway company.

The existence and alleged terms of the agreement were disputed as well as the authority of Mr. Booth to bind the company in that respect. The railway was constructed through the lands of the applicant, and the right of way acquired from him. He afterwards laid out into town lots, with intersecting streets, lands adjoining the railway, and the application was to have certain of these streets carried across the line of railway.

The municipality had passed a by-law purporting to establish as public highways such streets without complying with section 632 of the Municipal Act, R.S.O., 1907, chapter 223.

It was objected that the applicant had no *locus standi* to be heard on such an application, which should be made by the municipality only, and that no such highway can be opened across the line of railway without the previous enactment of a by-law of the municipality to that effect, after fulfilment of these formalities.

Hearings at Ottawa, May 16 and June 6, 1905.

Judgment, June 9, 1905.

Killam, Chief Commissioner (4 Can. Ry. Cas., p. 272):

1. Under section 186, either a railway company or other parties may apply for leave to the railway company, and possibly in some cases to other parties, to construct a highway.

2. The by-law of the municipality was imperative to establish a highway across the railway against the will of the company.

3. The Surveys Act, R.S.O. 1897, ch. 181, sec. 39, cannot create highways across the land of a railway company or give any right to the applicant to have his streets extended across the railway.

4. A railway company may, with the leave of the Board, lay out and dedicate portions of its right of way for use as highways which the municipality could accept without passing a by-law for that purpose.

5. The applicant is only entitled to an order from the Board authorizing the railway company to lay out and construct such highways. The by-laws of the municipality may be considered an acceptance of such highways.

6. The Board does not enforce specific performance of such agreements. It is not empowered to compel the railway company to construct the highway at the instance of the applicant.

7. As no other court or authority than the Board can legally allow the railway company or any other person to construct the highway, the application should proceed for the purpose of enabling the Board to determine whether it will give this permission.

Guelph and Goderich Railway Company v. Grand Trunk Railway Company.

This was an application by the Guelph and Goderich Railway Company, under section 137 of the Railway Act, 1903, for authority to take possession of, use and occupy land of the Grand Trunk Railway Company at Goderich.

The land sought to be taken was a portion of strip along the harbour of the town of Goderich upon the waterside of which the Grand Trunk Railway Company had a number of tracks and other improvements. The particular portion applied for was not occupied by the tracks or used in any way by the Grand Trunk Railway Company, but that company claimed that it would be likely to require, in the future, for its business at that point, two additional sets of tracks upon the land in question.

The applicant company desired to take and use not only the portion absolutely required for its tracks, but also a further strip for support.

The Board's Chief Engineer reported that one additional track would meet all the reasonable requirements of the Grand Trunk Railway Company for the future and that the quantity he recommended that the Guelph and Goderich Railway Company be authorized to take was the least that would be reasonably required for its tracks and their support.

Hearing at Ottawa, March 21, 1905.

Judgment, July 17, 1905.

Killam, Chief Commissioner: Railway companies have been granted by the legislature very great powers to take property without the consent of the owners. In the exercise of these powers they frequently cause serious discomfort and inconvenience to individuals, and in many cases deprive parties of property urgently needed for business purposes.

Section 137 of the Railway Act, 1903, places railway companies under liability to be subjected to similar treatment to that which, by the general expropriation clauses of the Act, they are empowered to mete out to private individuals.

Parliament desires that the way should be kept clear for the construction of additional railways, and that existing railway companies should not be allowed to monopolize the lands advantageously situated for railway purposes at any particular point.

The board is empowered by this legislation to authorize one railway company to occupy and use the lands of another, even to the serious loss and detriment of the latter. Due compensation being made therefor care should be taken to avoid such injury, except where the public interest imperatively requires it.

It is difficult to estimate in advance the probable requirements of the distant future. On such applications endeavour should be made to allow for future development; and, if it can be avoided, encroachment upon the property likely to be reasonably required for the purposes of the existing railway should not be authorized. On the other hand, the Board must guard against the use by an existing railway company of an exaggerated estimate of its probable requirements for the purpose of placing at a disadvantage an incoming competitor.

It has not been shown that there is any need of even the one additional track for the purposes of the business of the Grand Trunk Railway Company in Goderich 'If that time should ever arrive the Board, or such body as shall then exercise its present authority, can make such provision as may seem meet.'

Held, that order should be authorizing the Guelph and Goderich Railway Company to take possession, use and occupy the lands estimated by the engineer of the Board to be required for its purpose, such compensation therefor to be paid by that company as shall be fixed by agreement between the two companies, or, in case they cannot agree by the Board.

Held, also, that while the Board has the power to rescind or vary any of its orders, this order should expressly provide that it is subject to be varied or rescinded

by the Board; thus the parties will have full notice that such change may be made as future developments shall require.

Preston and Berlin Street Railway Company v. Grand Trunk Railway Company.

The Preston and Berlin Street Railway Company applied, under section 137 of the Railway Act, 1903, for authority to take possession of, use and occupy so much of the lands of the Grand Trunk Railway Company's right of way at the crossing of Caroline and Erb streets, in the town of Waterloo, as is necessary for the applicant company's crossing at these points.

The Preston and Berlin Company was incorporated by letters patent under the great seal of the province of Ontario.

Hearing at Ottawa, August 29, 1905.

Killam, Chief Commissioner: Section 137 gives to a company, if the Board authorizes it, the power to take and use the land of a railway company. The words 'the company,' referred to in that section means a railway company within the legislative authority of the Parliament of Canada.

The Board has no jurisdiction to authorize the taking of the lands applied for.

Bertram & Sons' application Branch line.

This was an application by John Bertram & Sons, Ltd., of Dundas, Ontario, for an order directing the Hamilton and Dundas Street Railway Company and the Toronto, Hamilton and Buffalo Railway Company, or one of them, to construct and maintain a branch line from the railway of the Hamilton and Dundas Street Railway Company from Hatt street, in the town of Dundas, to the lands and premises of the applicants.

The Hamilton and Dundas Street Railway Company was incorporated by Act of the legislature of the province of Ontario, and its railway was never declared by the parliament of Canada a work for the general advantage of Canda.

The contention on behalf of the applicants was that section 7 of the Railway Act, gave the Board jurisdiction.

This section provides that 'every railway, steam or electric street railway or tramway, the construction or operation of which is authorized by a special Act passed by the legislature of the province, now or hereafter connecting with or crossing a railway which, at the time of such connecting or crossing, is subject to the legislative authority of the parliament of Canada, is hereby declared to be a work for the general advantage of Canada in respect only to such connection or crossing, or to through triffic thereon.....'

The Toronto, Hamilton and Buffalo Railway Company is subject to the legislative authority of the parliament of Canada.

Hearing at Toronto, December 11, 1905.

Judgment, December 11, 1905.

Killam, Chief Commissioner: These provincial railways are declared to be works for the general advantage of Canada in respect only of the making of the physical connection, the crossing of one by the other, and the through traffic between them. That does not include the making of sidings or the giving of facilities for traffic.

Its purpose is to make those railways authorized by the provincial legislatures subject to the Dominion Railways Act in respect of certain matters only, and not to make the whole of these railways, after they have once been connected, and become in one sense a connection of a Dominion railway, wholly subject to the Act for all purposes.

Held, that the Hamilton and Dundas Street Railway Company was not within the Board's jurisdiction and that the Board has no power to make an order directing it to give a siding.

The Canadian Pacific Railway Company v. the township of North Dumfries.

Application by the Canadian Pacific Railway Company for authority to construct and operate railway tracks for a term of ten years over the present line of a highway in the township of North Dumfries, Ontario, to close to public traffic a portion of such highway, and to open in lieu thereof a new road.

The company had a spur track running from its main line at Ayr to a mill, and from this spur line sidings were run into a ballast pit, crossing in their course the highway in question.

Arrangements had been made with the owners of lands adjoining the gravel pit on one side of the highway and adjoining the company's mill spur on the other side of the highway, for the acquisition of further lands containing gravel; and the company desired to excavate farther back into the side of the hill to a depth much below the level of the highway, and for that purpose to cut away the soil of the highway a similar depth, and also for a period of fifteen years to divert the highway so that it would run around the company's land and be crossed on one side by the spur leading from the station at Ayr to the mill and gravel pit.

It was objected that the Railway Act did not authorize the diversion of a highway except for the purpose of its being crossed by or carried opposite the main line of the railway.

Hearing at Galt, November 6, 1905.

Judgment.

Killam, Chief Commissioner: Gravel is necessary for properly ballasting a line of railway and keeping it in a proper state of efficiency. The ordinary method of obtaining such gravel for use on a line of railway is to construct spurs or sidings to points where the gravel is to be obtained, and to carry it therefrom by railway locomotives and cars to the line on which it is to be used.

Section 141 shows that the acquisition of lands on which gravel is to be found, and the construction thereto of our spur lines, are without the powers intended by parliament to be exercised by a railway company.

Where the railway company can acquire the lands containing the gravel, and have a right of way thereto, it is not necessary to take the steps prescribed by section 141. For the purposes of such spur line, the railway company can exercise the powers for the diversion of highways given by the Act, as well as for the purpose of the construction and operation of the main line of railway.

In order to the proper excavation of the gravel pit to the depth to which the gravel goes, and for the proper operation of gravel trains, the railway company requires to cut through the highway more than once. A single cutting across the highway of the ordinary width for one track, would be insufficient. In order to keep the highway on its present site in a fit state for travel a long bridge or series of bridges would be necessary.

The railway company, in lieu thereof can properly be authorized to divert the highway at this point for the period of time estimated by it to be necessary for the purpose of exhausting the gravel pit.

By the municipal law of Ontario, the municipality in which the highway is situated is entitled to dispose of gravel in the soil of a public highway, and to maintain trespass against any person taking the same. The railway company does not desire to deprive the municipality of the gravel in the soil of the highway and is willing to restore the site of the highway to a satisfactory condition for public travel at the conclusion of its operations.

Section 2, subsections (s) and (bb), 118, 119, 141 and 186 of the Railway Act, 1903, referred to.

Held, that the diversion should be allowed upon proper terms for safeguarding the interests of the municipality and of the public.

T. D. Robinson & Son v. The Canadian Northern Railway Company.

This was an application by T. D. Robinson & Son, of the city of Winnipeg, for an order directing the Canadian Northern Railway Company to replace the siding wrongfully taken up by it from the applicants' property immediately adjoining the station and main line and yards of the said railway company in the said city of Winnipeg or any such other part of the applicants' yard as to the Board may seem just; or in the alternative that general delivery of all freights consigned to the applicants be made to the siding at present erected close to the applicants' yards and for such other relief as to the Board may seem just.

The applicants were owners of lands immediately adjoining the main line passenger station and the yards of the railway company in the city of Winnipeg and formerly had a private siding extending from a point of their land into the station yards of the company and connecting with the railway. The siding was constructed and owned by the railway company, who had, however, acquired no title to any part of the land of the applicants on which the said siding was placed.

The railway company later took up the siding, alleging, as a reason, that it was inconvenient for them to continue the use of it to the applicants, and as a result this application was made to the Board.

It was objected, on behalf of the railway company, that the Board had no jurisdiction to make an order as applied for; that the only section of the Railway Act empowering the Board to order the construction of spur lines is 176, and unless the parties should consent to an order made with any other provisions, the Board would be limited to making this order strictly in accordance with the provisions of that section.

Hearing at Winnipeg, September 11, 1905.

Judgment, January 6, 1906.

Killam, Chief Commissioner: In taking from the applicants the sidings and railroad connection formerly enjoyed by them, the railway company deprived the applicants of reasonable facilities which the company should be directed to restore.

The applicants did not apply under section 176 of the Railway Act as owners of an industry for an order to compel the company to construct a branch or spur line. Their lands adjoins the railway yard of the company, and no order was necessary to enable the railway company to construct a line upon its own land to the boundary line between its property and that of the applicants, or to make connection at such boundary line with a siding upon the applicants' land and transfer cars to and from such siding.

The siding and connection, and the privilege of loading cars and delivering goods for carriage on such a siding and of receiving and unloading goods by means thereof, may properly be required as facilities within the Act.

While the Board does not hold that the railway company should be made to furnish similar facilities to every applicant, in view of the previous supply of the same to the applicants and of the company's practice in freely furnishing such accommodation to those engaged in the same and other branches of business, as well as the other facts and circumstances disclosed, these facilities should be regarded as reasonable and proper ones which the company should afford to the applicants.

Under all the circumstances, the discontinuance of the former service was unreasonable. Railway companies should not be allowed to furnish and cut off such facilities capriciously.

An order directing the railway company, in the general terms of section 253, to afford to the applicants all reasonable and proper facilities for the receiving, &c., would not be sufficient. The authorities cited by counsel for the company were not, in the opinion of the Board, conclusive against its jurisdiction to direct specifically the continuance of previous facilities which had been unreasonably discontinued.

Held, that an order should go directing the railway company to restore the spur track facilities formerly enjoyed by the applicants for the carriage, despatch and receipt of freight in carloads over, to, and from the line of the railway company and the connection for that purpose, between such spur track and a railway siding on the land of the applicants; the company to have the option of constructing the siding on the applicants' land, at the expense of the applicants, or of allowing this to be done by the applicants, who shall bear the expense of making the necessary connection. The company should also have the option of constructing the track from such point on its line, and to such point on the applicants' land, as it shall think proper.

Order issued February 19, 1906.

NOTE.—The railway company appealed to the Supreme Court of Canada from the order of the Board, dated the 19th day of February, 1906, on the question of the Board's jurisdiction to make the order. Appeal dismissed.

Winnipeg Builders' Exchange.

This was an application by the Winnipeg Builders' Exchange for an order directing the Canadian Pacific Railway Company, the Canadian Northern Railway Company, and the Manitoba Railway Company to interchange freight of all grades and classes at the city of Winnipeg.

Hearing at Winnipeg, September 11, 1905.

Killam, Chief Commissioner: Railway companies are not entitled, under sections 214 and 253 of the Railway Act, 1903, to distinguish between different kinds of traffic by refusing to certain commodities the facilities for interchange which are given in respect of other commodities, but in view of the congested state of traffic on railways in Manitoba at that time, the Board did not think it proper to direct that any change be made immediately in the practice therefore followed in that respect.

Held, that an order should issue directing that on and after the 1st day of January, 1906, all freight in carloads shall, when carried over the railway of the Canadian Pacific Railway Company or the Canadian Northern Railway Company to the city of Winnipeg, or the town of St. Boniface, or delivered to such other company at Winnipeg or St. Boniface for carriage, be transferred by the one company to the other in the original car at some point of junction of their lines in the vicinity of St. Boniface or Winnipeg, when so consigned.

In view of the condition of the line along the west side of the Red river, commonly known as the 'transfer track,' and the total insufficiency of that line for the interchange of such traffic, the railway companies were left to make the interchange at such points as circumstances appeared to them to warrant.

The Canadian Pacific Railway Company v. The Grand Trunk Railway Company.

This was an application by the Canadian Pacific Railway Company for an order directing the Grand Trunk Railway Company to afford proper facilities for the interchange of traffic between the said companies over the branch authorized by order of the 6th of July, 1904, to be constructed by the Grand Trunk Railway Company from a point on its line between London and St. Mary's to the line of the Canadian Pacific Railway Company, between London and Toronto, and fixed the amount to be charged for such interchange of traffic and the interswitching of cars over the said branch.

The only connection at or near London, between the lines of the two railways, is by this branch.

The Grand Trunk Railway Company's lines in and through the city of London were in evidence long before the Canadian Pacific Railway was constructed. It had extensive terminal properties, including a large number of sidings to various business and manufacturing premises and an extensive business at that point. The terminal facilities and business of the Canadian Pacific Railway Company at London, on the other hand, were comparatively small.

By means of this branch the Canadian Pacific Railway Company was given direct access to a large number of business premises in London, which it did not previously have.

Urged on behalf of the Grand Trunk Railway Company, that as the proposed connection would be much more advantageous to the Canadian Pacific Railway Company than to it, the Grand Trunk Company should receive much the larger proportion in the division of rates for traffic interchanged between the two companies—much greater than that which would be a fair remuneration for the mere service rendered in the transportation of cars over this branch and its London terminal lines and the loading and unloading of the same.

Secs. 253, 266, 267 and 271 of the Railway Act, 1903, referred to.

Hearing at Ottawa, June 20, 1905.

Judgment, July 16, 1905.

Killam, Chief Commissioner: The provisions of the Railway Act which require railway companies thus to interchange traffic at connecting points are introduced, not for the purpose of benefiting one railway company at the expense of another, but solely in the interest of the public. The law cannot recognize anything in the nature of a good-will of the business of either railway company thus affected, for which another should give compensation. The division between railway companies of the joint rates for traffic thus interchanged should be made upon the principle of giving reasonable compensation for the services and facilities furnished by the respective companies in respect of the particular traffic interchanged, and not by reference to the magnitude of the business of the company, or the other particular points, or the respective advantages which each can offer to the other there, or a comparison of the loss which the one is likely to sustain with the gain likely to accrue to the other from the giving of the facilities which the law requires.

The Board cannot properly deal with the question of the division of such rates or the allowance of charges for switching in a general way, and by reference to all the points in Canada where the railways may connect. In each case the nature and value of the service to be rendered and the facilities to be used must be taken into consideration.

The Grand Trunk Railway Company being obliged to furnish, for the carriage over its portion of the continuous line, for the receipt and delivery of the same, and for the loading and unloading of cars for the purpose, the same facilities as in respect of traffic passing over its own lines only or transferred to or by it at distant points of the Canadian Pacific Railway system, the apportionment of rates should be made upon this basis.

Held, that order should go requiring the Grand Trunk Railway Company to afford all reasonable and prorper facilities for receiving, forwarding and delivering all traffic offered to it in cars wholly or partially loaded for passage over the branch in question and its lines connected therewith and of unloaded cars so offered and of freight offered to it for carriage to and over the lines of the Canadian Pacific Railway by the medium of the said branch, and for the interchange by means of the said branch of traffic between its lines and those of the Canadian Pacific Railway Company, as well as between the lines of the Canadian Pacific Railway Company and those of other railway companies connecting with the lines of the Grand Trunk Railway Company,

and providing that the rates to be charged for such traffic shall be those provided for by any joint tariffs in existence between the railway companies interested, and, in the event of there being none, the rates charged by the Grand Trunk Railway Company between the same points, and, in the absence of either the rates charged by the Canadian Pacific Railway Company between the same points; also, that in the division of rates for such traffic, the Grand Trunk Railway Company shall be entitled to charge and receive the following tolls for switching freight and live stock traffic, in carloads, from and to the Canadian Pacific Railway at or near London by means of the said branch, namely:—

(*a*) Between the point of connection of the Grand Trunk Railway interchange track and the Canadian Pacific Railway siding, and all delivery tracks and siding owned or controlled by, or connecting with, the lines of the Grand Trunk Railway between and including the Canadian Packing Company's plant on the east and the London Street Railway interchange, known as Springbank siding, on the west, except as provided in clause (*b*), one cent per one hundred pounds, but not less than five dollars per carload, for each complete haul in either direction; no extra charge to be made for the movement of the empty car in the opposite direction.

(*b*) For the intermediate switching of through or joint freight and live stock traffic between the point of connection designated in clause (*a*) and the point of connection of the Grand Trunk Railway with the Père Marquette Railroad, three dollars per car, in either direction, regardless of the weight; no extra charge to be made for the transfer of the returning empty car.

Held, further, that the order should also provide that all devices, such as free or assisted cartage or cartage allowances intended to equalize the facilities of the respective railways of the Canadian Pacific Railway Company and the Grand Trunk Railway Company for the collection and delivery of freight at or near London, except the customary system of cartage published in the freight tariffs of the respective companies be prohibited and that all preference, prejudice and discrimination in such cartage system be prohibited.

Order dated July 25, 1905, issued.

NOTE.—An appeal to the Supreme Court of Canada from the Board's order or July 25, 1905, now pending.

Walker et al v. The Toronto and Niagara Power Company.

Two applications were made to the Board, one by John H. Walker and William Tuck, the other by James W. Alway, for an order rescinding an order of the Board authorizing a deviation from the located power line of the Toronto and Niagara Power Company, previously approved by the Board.

By order dated March 29, 1904, the board approved the location of the line of the Toronto and Niagara Power Company from 3 to 38 miles from the Niagara river. This included the line across lots 7, 18 and 19, in the 3rd concession of the township of Grimsby. Each of the three applicants is the owner of one of these lots.

On April 15, 1905, the board authorized a deviation from the located line, as approved. This was the order sought to be rescinded. The new plans showed a different location, beginning at lot 15, in the 3rd concession of Grimsby, and extending across (among other lands) lots 17, 18 and 19, at an approximate distance on these three lots three-quarters of a mile from the previous location across them.

The applications to rescind the order of April 15, 1905, were based on the grounds that the Railway Act did not permit a double expropriation, and that the company was in reality not deviating from the original line sanctioned by the board, but was constructing an additional or branch line in connection with its original line.

Hearing at Toronto, November 7, 1905.

Judgment, April 12, 1906.

Killam, Chief Commissioner (5 Can. Ry. Cas., 190): Held (1) that the company's powers under its Act of incorporation (2 Edw. VII., Ch. 107, Dom.) were not exceeded by the construction of one line, as in the case of a company authorized to build between two termini or any specified number of lines.

(2) That the cases relating to deviations by railway companies do not apply.

(3) Without considering the jurisdiction of the board to make the orders respecting location plans, the applications must be refused.

The Algoma Central and Hudson Bay Railway Company v. Grand Trunk Railway Company.

This was an application by the Algoma Central and Hudson Bay Railway Company for an order, under sections 266 and 267 of the Railway Act, 1903, to compel the Grand Trunk Railway Company to enter into a joint tariff with it upon traffic partly over the Grand Trunk Railway and partly by a line of steamships of the applicant company.

The Algoma Central and Hudson Bay Railway Company operates a line of railway from Sault Ste. Marie northwesterly for about 70 miles, and also a line of railway from Michipicoten harbour, on Lake Superior, for a short distance. It uses and operates a fleet of steamers, passenger and freight, plying between Sault Ste. Marie and Michipicoten harbour, on the one hand, and points on Lake Huron and other inland waters reached by the Grand Trunk Railway on the other.

Section 276 of the Railway Act, as making the provisions of sections 266 and 267 extend to the traffic mentioned, relied upon.

Hearing at Toronto, April 17, 1906.

Judgment, April 26, 1906.

Killiam, Chief Commissioner (5 Can. Ry. Cas., 196): Sections 253 and 271 relate solely to railway traffic, and not to traffic between a line of railway and water line.

A line of steamships operated by a railway company running to ports reached by the line or lines of another company does not constitute therewith a continuous route within the meaning of sections 266 and 267 of the Railway Act, 1903.

Application dismissed.

The City and County of St. John v. The Canadian Pacific Railway Company.

Application by the municipality of the City and County of St. John, New Brunswick, for an order under section 187 of the Railway Act, 1903, directing the Canadian Pacific Railway Company to construct and maintain suitable gates over a street in the village of Fairville, and one in the village of Milford, where the Canadian Pacific Railway crosses these streets.

Hearings at St. John, April 18, and Ottawa, November 22, 1905.

Judgment, June 5, 1906.

Killam, Chief Commissioner (5 Can. Ry. Cas., 161): The railway company was ordered to construct and maintain gates over the street crossing in Fairville and to install an electric bell at the crossing in Milford.

Held, that the board had jurisdiction, under section 47 of the Railway Act, 1903, to order the municipality to contribute to the expense of protecting its highway crossings, as in the case of municipalities in other provinces. City of Toronto *v.* Grand Trunk Railway Company, 37 S.C.R. 232, referred to.

By later order of the board, dated June 14, 1906, the cost of installing, operating and maintaining the gates of the Fairville street crossing was directed to be borne by the railway company, the wages of the day and night watchman employed at this crossing to be paid one-half by the municipality and one-half by the railway com-

pany; the cost of installing, operating and maintaining an electric bell at the Milford crossing to be borne by the railway company.

Re Apportionment of Cost for Protection of Highway Crossings.

Judgment of Chief Commissioner in the Almonte street crossings' application (June 15, 1906) '..... the usual practice of the Railway Committee of the Privy Council, which, before the constitution of the Board of Railway Commissioners, exercised jurisdiction respecting the protection of highway crossings, was to divide the cost of the protection of previously existing highway crossings by railways between the municipalities and the railway companies; that such has been the practice of this board, although it is recognized that no fixed rule can be laid down for determining whether the municipality should share the expense, or in what proportion it should do so. In a recent case, the jurisdiction of the Railway Committee to apportion such expense upon the municipality was upheld by the Supreme Court of Canada.

Niagara, St. Catharines and Toronto Railway Thorold Street Crossings.

This was an application by the Niagara, St. Catharines and Toronto Railway Company, under section 186 of the Railway Act, 1903, for leave to cross certain streets in the town of Thorold, in the township of Thorold, with its line of railway.

Hearing at Hamilton, May 8, 1906.

The town of Thorold opposed the application, contending that the applicant company's railway is a street railway or tramway, or is operated or to be operated as a street railway or tramway, and that leave could not be given to carry it across streets in the town without the consent of the town by by-law. Upon the evidence, it did not appear that the proposed branch line was a street railway or tramway, or intended to be operated as such. The applicant company's main line was constructed upon the company's right of way and did not run along the streets in Thorold, nor did its cars stop at street corners to take up or let off passengers, but only at its own stations.

In the year 1902, by authority of the parliament of Canada and of the legislature of the province of Ontario, the applicant company acquired the property and undertaking of the Port Dalhousie, St. Catharines and Thorold Electric Street Railway Company, Limited, a company incorporated under the authority of the legislature of the province of Ontario, for the construction and operation of an electric street railway, and the applicant company now operates the line of that street railway in and upon the streets of Thorold and elsewhere; but the branch line authorized by order of the board, and which the applicant company desired to carry across these streets, was to be taken from the main line of the applicant company's railway, and not from the street railway system.

Judgment, Chief Commissioner, June 19, 1906.

The prohibition in section 184 of the Railway Act, 1903, is against the authorization of the operation of a street railway or tramway along a highway. In the present case the application is for crossings only. In one case, the crossing is to be at an angle which would force the railway upon the street for a considerable distance, but it seems to be none the less a crossing. The evident intention of the Act is to require railway companies proposing to operate a street railway system, and to use the streets as their right of way, to procure the assent of the municipality for that purpose. The Act authorizes a company to carry its railway across streets by leave of the board, and the only qualification is that the consent of the municipality is required where the railway is a street railway or tramway which runs along, and not merely across, the street.

Held, that the application should be granted.

Re The MacGregor-Gourlay Co., Limited, Complaint.

This was a complaint by the MacGregor-Gourlay Co., Ltd., respecting the obstruction of South Water street, in the town of Galt, alleging that the Grand Valley Railway Company had raised its tracks from ten inches to two feet above the level of the street, in contravention of an agreement between the town and the railway company, entered into September 13, 1905.

Under this agreement, the company was required, amongst other things, to—

(*a*) macadamize 2 feet in width of the roadway where practicable—such work to be done in a manner satisfactory to the board of works, who were to have the power to direct what portion of the roadway of 36 feet in width should form the 22 feet to be macadamized;

(*b*) lay and maintain the lots of the surface of the ties so as to be flush with the adjoining the surface of the street; but where the track should be laid in or about the centre of the street, it was required to lay and maintain its rails so that the top thereof should be flush with the adjoining surface of the street.

The agreement also provided that any disputes were to be determined by the board of works of the town. The board caused its engineer to make an inspection of the line of the Grand Valley Railway Company along South Water street, and he reported that 'from the end of the bridge across the Grand river to the south end of the property owned by the Beers Tannery, the track along Water street is from 4 inches to 12 inches above the level of the street, so that access to the property on the west side of the street is cut off.....'

The engineer expressed the opinion that the company should put its tracks down to the level of the street, so that the owners of the property on the west side of the street might have unobstructed access to their property.

Under direction, the company was asked to advise the board whether it had since complied with the terms of the agreement between it and the town, and the clerk of the town notified that this had been done, with the additional notification that, under sections 186 and 187 of the Railway Act, 1903, the board has jurisdiction to direct that such works be executed or measures taken as appear to the board best adopted to remove or diminish the danger or obstruction arising or likely to arise from the railway company's tracks; and that the board is not bound in this respect by the decision of the board of works; but may, if the civic authorities allow the railway and the street to remain in such a condition as unduly to obstruct traffic, direct the town, instead of the railway company, to take the necessary measures for protection of the public.

June 25, 1906.

In re Cockerline and Guelph and Goderich Railway Company.

Robert J. Cockerline applied to the board for an order directing the Guelph and Goderich Railway Company to make him an undercrossing between the parts of his farm severed by the railway line. The facts are specifically set forth in judgment of the Chief Commissioner below.

Hearing at Stratford, May 28, 1907.

Judgment, June 26, 1906.

Killam, Chief Commissioner (5 Can. Ry. Cas., pp. 3, 4 *et seq.*): The board made an order upon the advice of its engineer, directing the Guelph and Goderich Railway Company to provide for R. J. Cockerline three farm crossings over its line through his farm, two level crossings and one undercrossing. The railway company has applied to have this order set aside on the ground that the board has no jurisdiction to require it to make a farm crossing under its railway.

Section 198 of the Railway Act, 1903, requires that,

'Every company shall make crossings for persons across whose lands the railway is carried, convenient and proper for the crossing of the railway for farm purposes. In crossing with live stock, the same shall be in charge of some competent person, who shall use all reasonable care and precaution to avoid accidents.'

In the case of Armstrong v. James Bay Railway Company, 7 O.W.R. 75, 12 O.L.R. 137, Sir Wm. Meredith, C.J., expressed the opinion that the first subsection of section 198 did not apply to a passageway under the railway track; he referred particularly to the provision requiring live stock, when crossing, to be in charge of a competent person, as indicating this view.

In this connection, it seems well to refer to section 191 of the Railway Act of 1888, by which

'Every company shall make crossings for persons across whose lands the railway is carried, convenient and proper for the crossing of the railway by farmers' implements, carts and other vehicles.'

That required crossings to be made 'convenient and proper' for the purposes specified.

In Reist v. Grand Trunk Railway Company, 6 U.C.C.P. 421, Draper, C.J., expressed the opinion that, under 14 and 15 Vict., ch. 51, sec. 13, requiring a company 'to erect and maintain' (among other things) 'farm crossings for the use of proprietors of lands adjoining the railway,' the expression 'farm crossing' might include' a passage across and upon the railway itself—a crossing at grade, or a bridge over, or a tunnel under the railway,' adding, 'I observe nothing in the Act which necessarily excludes either of these interpretations.'

The language of the first subsection of section 198 is much changed. The crossings are required to be 'convenient and proper for the crossing of the railway for farm purposes.' In Armstrong v. James Bay Railway Company, 7 O.W.R. 715, 12 O.L.R. 137, the learned Chief Justice indicated a doubt as to the power of the Board, under the second subsection of section 198, to require a company to provide an undercrossing.

Apart from the reference to live stock, in the first subsection, I should feel no difficulty in agreeing with the view taken by Draper, C.J., in Reist v. Grand Trunk Railway, and in applying that to the construction of section 191 of the Act of 1888.

In construing section 198 of the present Act, we should, I think, start from the position that the previous law required undercrossings, if other convenient and proper ones could not be obtained. Subsection 2 is wide enough in its terms to include undercrossings. It gives the Board power to order a company to provide a suitable farm crossing, and to order and direct how, when and where it shall be constructed.

The principal argument against that view is that the word 'across' means 'over,' or 'on the surface of.' In Webster's dictionary the word is defined as meaning 'from side to side,' 'athwart,' 'crosswise,' 'quite over.' The latter expression certainly does indicate something above, but the other equivalents do not. Usually, resort must be had to the context. We may go across a river upon a bridge, by boat, by swimming, or by a tunnel underneath the water. A net or a rope may be properly said to be stretched across a river although underneath the water. The word 'across' is equally applicable in any case.

In section 184 of the Railway Act, 1903, authority is given to carry a railway 'upon, along or across' a highway.

By section 186 authority is given, on any application for leave to construct the railway 'upon, along or across' a highway, to order it to be carried over or under the highway. The section makes it clear that in crossing, the highway may be placed under the railway, or the railway under the highway; but the undercrossing and the overcrossing equally are included under the expression 'across.'

Section 197 of the Act speaks of drainage or drainage works 'upon and across the property of the landowners,' and 'upon and across the railway and lands of the company.' Having reference to the subject, drains underneath the property or railway would naturally be considered as included, and this is obvious by the latter part of the section providing that 'no drainage works shall be constructed or reconstructed upon, along, under or across the railway or lands of the company's &c.

In the present case, the railway is carried across Mr. Cockerline's farm upon a high embankment constructed for the purpose, any crossing over which would be inconvenient. I do not think that the so-called level crossings alone would be considered to be 'suitable.'

Some attempt was made, upon the hearing of the application, to show that Cockerline, in conveying the right of way to the railway company and agreeing upon a price therefor, intended to release the right to a farm crossing, or farm crossings, and to accept compensation for their loss.

To my mind, the evidence establishes directly the contrary, and that Cockerline acted under assurances calculated to lead him to believe, and which did lead him to believe, that his application to the Board for an undercrossing would not be prejudiced by the execution of the conveyance and acceptance of the purchase money.

Under all the circumstances, it appears to me that the order should be affirmed, with costs to be fixed by the secretary of the board.

Re Complaint of Staunton's, Limited, Toronto.

This was a complaint by Staunton's' Limited, of Toronto, against the Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company, alleging that the freight rates charged by these companies on wall paper shipped from Toronto to points in eastern Ontario and in the provinces of Quebec, New Brunswick and Nova Scotia, were excessive and discriminatory in comparison with the rates in effect upon similar merchandise carried in the opposite direction; and complainants applied for an order disallowing the present east-bound rates on their goods and restoring those in effect prior to November 15, 1905.

Hearing at Toronto, May 9, 1906.

Judgment, Chief Commissioner, June 28, 1906.

The Board considers that the long continued existences of the former tolls affords strong evidence of their reasonableness, and that it does not appear that there has been any change of circumstances, or that there is any sufficient reason for the changes recently made in those tolls; that the charging of higher tolls for the traffic in question from Toronto eastward than are charged for similar traffic from Montreal and other points westward constitutes an unjust discrimination against the Toronto shippers, and that these tolls should be equalized.

Order of Board, July 31, directing that the said companies reduce their tolls for the said east-bound traffic from Toronto to Montreal to those in the tariffs for similar west-bound traffic between the same points; that the tolls to Montreal be not exceeded to Ottawa, nor to intermediate points; and that the tolls to points east of Montreal be reduced by the amount of the said reduction to Montreal. Also that the tariffs to be made under the order come into force not later than September 10, next.

P. C. Pathiarche and Burlington Canning Co. v. The Grand Trunk Railway Co. and The Hamilton Radial Electric Street Railway Co.

This was an application, under sections 253 and 271 of the Railway Act, 1903, to compel an interchange of traffic between the two railways.

The Hamilton Radial Electric Street Railway Company was incorporated by Act of the legislature of the province of Ontario. Its undertaking and railway have

never been declared by the parliament of Canada to be a work for the general advantage of Canada, or for the advantage of two or more of the provinces.

The Grand Trunk Railway was, by the Railway Act of 1888, declared a work for the general advantage of Canada, and subject to the legislative authority of the parliament of Canada.

The Act of 1888 was repealed upon the coming into force of the Railway Act, 1903.

By section 7 of the latter Act.

'Every railway, steam or electric street railway or tramway, the construction or operation of which is authorized by a special Act passed by the legislature of any province, now or hereinafter connecting with or crossing a railway which, at the time of such connection or crossing, is subject to the legislative authority of the parliament of Canada, is hereby declared to be a work for the general advantage of Canada in respect only to such connection or crossing or to through traffic thereon or anything appertaining thereto, and also to the provisions set forth in this Act relating to offences and penalties, navigable waters and criminal matters, and this Act shall apply to that extent only.'

Some years before the coming into force of the Railway Act, 1903, a physical connection was made between the two railways, but no order was obtained authorizing such connection either under section 173 of the Railway Act, 1888, or section 177 of the Railway Act, 1903, although a crossing had been authorized by the Railway Committee of the Privy Council in 1897.

Hearing at Hamilton, May 9, 1906.

Judgment, June 28, 1906.

Killam, Chief Commissioner (5 Can. Ry. Cas., 200): Held, that parliament has the incidental power to determine the terms upon which a railway, not otherwise subject to its legislative authority, may connect with or cross one that is so subject, and the obligations between the companies concerned.

British North America Act, section 91 (10) and (*c*), and section 92 (29), sections 306 and 307, Railway Act, 1888, and section 7, Railway Act, 1903, referred to.

Held, that such connection being illegal, no order should be made. An application to authorize the connection, under section 177 of the Railway Act, 1903, must first be made.

The Guelph and Goderich Railway Co. v. The Guelph Radial Railway Co.

The Guelph and Goderich Railway Company applied under section 177 of the Railway Act, 1903, for leave to construct and operate its railway across the railway of the Guelph Radial Railway Company on the Elora road, outside the limits of the city of Guelph.

The Guelph and Goderich Railway Company was incorporated by an Act of the parliament of Canada, 4 Edward VII., chapter 81, assented to June 6, 1904. A plan showing the location of its line across the Elora road, outside the city of Guelph, was approved by the Board on July 2, 1904, filed in the Registry Office on July 8, 1904, and notice of the proposed location published in local newspapers in August, 1904.

This application was filed on August 16, 1905, and an order was made giving leave to the Guelph and Goderich Railway Company to cross the highway at that point, on October 16, 1905.

On the 25th May, 1905, by 5 Edward VII., chapter 91, the Guelph Radial Railway Company was empowered to build and operate an extension of its railway on the Elora road, outside the city of Guelph. Its location had been authorized by a by-law passed by the council of the county of Wellington on June 4, 1904.

Hearing at Stratford, December 4, 1905.

Judgment, July 5, 1906.

Killam Chief Commissioner (5 Can. Ry. Cas., 180): Held, that the location and operation of the Radial Railway Company had, under the circumstances, become authorized on May 25, 1905, and was prior to that of the applicant company, and that, following the usual course, the applicant company must be at the expense of the crossing and maintenance of any necessary protection.

Ruling v. Erroneous Rate Questions.

Chief Commissioner, July 31, 1906:—

The Board is appointed to enforce the Railway Act—not ordinary contracts. In my opinion, the Board should recognize as valid only the tolls set out in the tariffs authorized by the Act, and it should not assume to interfere with charges made in accordance with such tariffs on the plea that lower rates were quoted by a company's agent. Such a practice would open the door to rebates and preferences.

If parties have any right to relief in such cases, they should seek it in the ordinary courts on the ground of breach of special contract or misrepresentation.

The Act giving the Board jurisdiction respecting rates of express companies does not apply to past transactions, and the functions of the Board will be confined to the approval of tariffs for the future and dealings with tolls under them.

Chief Commissioner, September 19, 1906.

Re Grand Trunk Pacific Right of Way at Clover Bar, Alberta.

Complaint was made to the Board respecting the methods adopted by agents of the Grand Trunk Pacific Company for the acquisition of lands for the company's right of way.

Held, Chief Commissioner, October 9, 1906, that the subject-matter of the petition is one over which the Board has no jurisdiction; that, under the Railway Act, 1903, upon approval of its location plans, a railway company is entitled to acquire its right of way either by voluntary conveyance for the owners of the necessary lands or by expropriation proceedings. The Act gives to the Board of Railway Commissioners no authority respecting either method of acquisition of these lands. If parties are induced by unlawful misrepresentation or redress to part with their lands on unfavourable terms, they must seek their redress in the ordinary tribunals. The proceedings for expropriation are set out in the statute, and the Board is given no authority over either the procedure or the amount of the compensation.

Re Postal Cars.

Judgment, Chief Commissioner, October 10, 1906.

I am not at all clear that the Board has jurisdiction to compel railway companies to alter their ordinary practice in regard to the respective locations of mail and baggage cars. Possibly the jurisdiction may exist under section 212, subsection 2, of the Railway Act, 1903; but, even if there is such jurisdiction, I do not think that the board should interfere with the discretion of railway officials upon this point.

It is not easy to determine whether there is materially greater danger to parties in the first than there is to those in the second car.

Even if greater consideration should be given to those who are not employees of the railway company, there does not appear to be any reason for giving preference to mail clerks over the employees of express companies.

a *In re Highway Crossings.*

Statement of facts taken from judgment of Chief Commissioner:

During the official trip of the Board in western Canada in the summer of 1906, a number of applications were brought before it in respect of street crossings over

railways in the province of Alberta. One of these related to a large number of crossings in the city of Calgary over the line of the Canadian Pacific Railway Company. This was settled by agreement between the city and the railway company, and an order, in conformity with the agreement, was issued later.

Another was an application by the town of High River for an order directing the Canadian Pacific Railway Company to provide and construct a suitable highway crossing where its railway intersected Fourth street in that town. The application alleged that there was no railway crossing between the Calgary and Macleod trail and Seventh street, according to a plan which showed Fourth street as lying in the intermediate space, and that the opening of Fourth street was necessary for the proper enjoyment of the use of the streets of the town and for the safety of the inhabitants.

A third was the application of the town of Olds for leave to construct certain highways across the railway of the Canadian Pacific Railway Company's Calgary and Edmonton branch at Olds, to join and connect certain main streets lying on each side of the railway.

While this application alleged the previous existence of certain crossings upon the lines of certain main streets, known as Second and Third streets, is further alleged that the only legal crossing which the town had at the time of the application was at the extreme north end of the town, which was north of either of the streets named.

A fourth was that of the town of Didsbury, for an order, 'under the provisions of the Railway Act, 1903, respecting highway crossings, being sections 184 to 191, inclusive, and particularly under section 187, directing the Canadian Pacific Railway Company to construct and provide a suitable crossing, and to maintain the same perpetually where the continuation of Hespeler street, in the said town of Didsbury, if continued easterly, without the obstruction being placed thereon by the Canadian Pacific Railway Company, would cross the said railway company's right of way.'

The application alleged that Hespeler street in Didsbury, 'for some years past, and until it was obstructed by the said Canadian Pacific Railway Company on or about the 1st day of August, 1906, was a highway, and was used as such by the public.' It further alleged an express agreement between the railway company and the town for making Hespeler street a perpetual highway across the railway, and that the town had, at the request of the railway company, improved Hespeler street upon the company's right of way, and had expended a considerable sum of money in doing so; that the railway company had placed a large quantity of earth upon Hespeler street where it crossed the company's right of way, and that the town had used and employed this earth in further grading and improving the street at the request of the railway company; and that the railway company had indicated by a sign that there was a highway crossing over the railway at that point; and setting forth other circumstances as showing the importance, in the public interest, of having a highway crossing at Hespeler street.

The application further alleged that the railway company had recently obstructed the crossing at Hespeler street and deprived the public of the use and enjoyment thereof.

A fifth application was made by the village of Leduc for a street crossing over the Calgary and Edmonton branch of the Canadian Pacific Railway Company at Mill street. In answer to this application, the Canadian Pacific Railway Company submitted a plan of the town site and existing crossings at Leduc, pointing out that 'from the plan it will be seen that there is already a crossing at the point known as "Edmonton Trail," another nearly opposite Main street, and a third about 1,600 feet south of the latter.'

Upon examination of the locality by an engineer of the Board, he reported that he had inspected the site of the proposed crossing in company with the overseer and principal business men of the village, and that 'the overseer and the others agreed

that, if the village has to build and maintain the crossing, it would be just as well for them to build a road along the east side of the railway from Mill street north to Main street, and cross there where there is already a crossing.

Subsequently, the village presented to the Board a formal petition with reference to the crossing at Main street, setting out that what was and is sought was the making permanent of a crossing at Main street, which crossing is and always has been the most commonly used access to the railway station.

In the case of High River, negotiations took place between the town and the railway company which did not result in a complete agreement, but served only to indicate the respective positions of the parties. The town desired, in addition to the crossing at Fourth street, to have the passenger station of the company removed to the neighbourhood of that crossing, and offered, in consideration of these advantages, to pay a certain sum towards the expense of such removal, and to procure for the railway company a piece of land for the prolongation of its yard at the town in a southerly direction. The company claimed to be bound by an agreement with a private party which prohibited it from removing the station to the desired position, and objected to the establishment of a street crossing at Fourth street, but offered to allow a crossing to be established at Third street and to remove the station to the neighbourhood of that crossing, provided that town would procure for the company the proposed lands, and would close the admittedly existing highway crossing over the railway at Seventh street. The town refused to accept the condition for the closing of the crossing at Seventh street.

In the case of the town of Olds, the railway company offered a crossing at Second street, with an extension of Railway street (which runs parallel with the railway) to Seventh street, and another crossing at Seventh street. The town was willing to limit its request to a crossing at Third street and one at Seventh street, with the extension mentioned.

Didsbury is not a town, but a village municipality, established under the ordinances of the Northwest Territories. Counsel for the village claimed that a public highway had been established at Didsbury by dedication of the railway company, after the construction of the railway. It was not suggested that any public highway had existed at that point before the railway was constructed. The contention on behalf of the railway company, was that it was incompetent for the company to establish a highway by dedication without leave of the Railway Committee of the Privy Council under the legislation preceding the Railway Act, 1903, or of the Board since its establishment. Counsel for the village argued that the railway company could so dedicate without leave.

In the case of the Leduc application, which is also a village established under the ordinances of the Northwest Territories, counsel for the railway company submitted an offer to allow a crossing to be authorized at Main street, as well as another at Douglas street, in the village, upon the condition that it should be ordered that, in case of any protective measures or appliances being required at the crossing in the future, the cost thereof should be borne by the village. It was claimed, on behalf of the village, that it had for a long time a crossing at Main street, and that the village ought not to be now bound to bear such expense.

Judgment, Chief Commissioner Killam, November 6, 1906.

..... In connection with these cases it appears to be desirable to consider the functions of the Board with respect to railway and highway crossings. Section 184 authorizes the Board to grant leave to a railway company to carry its track upon, along, or across an existing highway. Section 186 lays down a method of procedure 'upon any application for leave to construct the railway upon, along or across an existing railway,' and authorizes the Board to grant such application upon such terms and conditions as to protection, safety, and convenience of the public as it may deem expedient, or to order that the highway be carried over or under the railway

and works to be executed or measures taken to remove or diminish the danger or obstruction arising or likely to arise therefrom; and section 187 confers upon the Board the power, in the case of a railway already existing upon, along, or across a highway, to make any order in respect thereto as in the previous section provided.

Other provisions of the Act impose upon the railway company specific duties with reference to highways, or assign to the Board certain specified powers with respect thereto; and the Board, under the general jurisdiction given by section 3, is empowered to compel railway companies to observe the duties cast upon them by such provisions of the Railway Act.

As I have previously had occasion to point out, the Board is a creature of the statute, and has only the powers given to it by statute. While constituted a court for the purpose of exercising the jurisdiction conferred upon it, the Board is not a court for the determination of all questions arising between the public or individuals and a railway company. The Board has no general jurisdiction to determine wheter a public right of crossing over a railway exists; but, in cases in which it is called upon to exercise the powers specifically conferred upon it with respect to highways, or its jurisdiction to enforce performance of the duties of railway companies with respect to highways, it has incidentally, the power to inquire and determine whether, in fact, a right of crossing does or does not exist at a particular point.

For two or three years the public were in the habit of crossing the railway upon the line of Hespeler street in Didsbury, and this was facilitated by the grading of a street line upon the company's right of way outside the rails and by planking at and between the rails. This work has been undone and the crossing so obstructed that the public cannot now cross. It appears to me, that, if there is a public right of crossing at that point, the Board has jurisdiction, under sections 186 and 187 of the Act to direct that such measures be taken as to enable the public to cross there safely and conveniently, and that, for the purpose, the Board has jurisdiction to determine whether the right of public crossing exists.

The Railway Act, 1903, nowhere prohibits in express terms the construction of a highway, or the giving of a public right of crossing over a railway, without the leave of the Board; but it appears to assume that, for some purpose, such leave is necessary. I take it to be assumed that, without some provision therefor, a municipality or other body having power under the local law to open a highway across private property without the consent of the owner, could not open such across property dedicated by authority of the parliament of Canada to the purposes of a railway; and it appears to me that the provisions of section 186 are intended, in part, to afford the means of enabling such municipality or body to do this where the public interests require it. But, in my opinion, this clause enabling the Board to give leave for the construction of a highway across a railway, was not intended to provide a means by which private individuals, or bodies not otherwise possessed of power to open highways, could do so.

In this connection the question naturally arises whether the steps to open such a highway must be taken by the municipality or other body in accordance with the law generally applicable to the opening of highways, and whether compensation has to be given and determined according to such law.

I have never hitherto been called upon definitely to determine that question, which is by no means a simple one. Hitherto, without careful consideration, I have expressed an inclination to the view that the local law is applicable. On further consideration, however, I doubt this; but, in view of the fact that the point is, so far as I know, wholly unsettled by authority, and of my having previously used expressions which may have induced parties to consider the question to be settled so far as this Board is concerned, I would be ready to receive any argument upon the point which any one might desire to offer. It is very probable that parliament intended the whole matter to be settled by this Board, and all the conditions in respect of

compensation, as well as of procedure, construction and precautions, to be determined by the Board. Section 36 gives to the Board general power to impose terms in making an order, and the provisions of section 47 appear capable of application to such a case without undue straining of language. The Board has already decided that it is not bound to grant compensation to one railway company for the crossing of its line by the railway of another company; and the same principle might be applied in cases of highway crossings.

But it should be observed that the power of the Board in this respect is to give leave. The Board is not authorized to direct or compel railway companies to construct or make highways across their lands where a public right of crossing does not already exist by law, though it may give leave to a company or to some other bodies, on some terms, to do so.

In the Didsbury case, counsel for the railway company cited the remarks of Hon. Mr. Blair, when Chief Commissioner, in an application made by the city of Calgary, in 1904, reported in volume 10 of the reports of proceedings of the Board, at page 457, as follows:—

'Hon. Mr. Blair: Your legal position I cannot think would be very much improved or strengthened by reason of what has transpired; without an order of the Railway Committee of the Privy Council, or without an order of this Board, you have no legal right whatever to cross those tracks, notwithstanding or no matter what may have been the understanding between you, or the agreement between you, or the user which has taken place, and no matter what dedication may have been made. The matter of dedication of a highway there would be a totally distinct and separate thing from the legalizing of the use of the right of way, or that portion which is occupied by the tracks of the railway company for the purposes of a public highway. You have got to have that authority or else you have no legal ground upon which to stand.'

Upon a previous citation in another case of these remarks, I expressed myself as being inclined to the same view. Counsel for the village, however, argued strongly for the power of the railway company to dedicate a portion of its right of way for use as a public highway without leave of the Railway Committee or of this Board. Upon a reference to Canadian authorities I do not find that the contention of the railway company is as well supported as I was inclined to think at the time of the hearing. Guthrie v. Canadian Pacific Railway Company, 31 S.C.R. 155, and Grand Trunk Railway Company v. Valliear, 2 Can. Ry. Cas. 45, 3 Can. Ry. Cas. 399, 7 O.L.R. 364, related to private rights; and Grand Trunk Railway Company v. Valliear was so distinguished in the Court of Appeal.

The expressions used by Hon. Mr. Blair and myself may have led counsel for the railway company to omit careful examination or argument of the question; and counsel for the village did not discuss the Canadian cases or the terms of the Railway Acts. It appears to me desirable, therefore, that before the Board makes a definite decision upon this important question, an opportunity should be given to the parties to present such further arguments in writing as they may desire; and, in this connection, it would be desirable that further consideration be given by counsel to some other questions, such as the sufficiency of the evidence to warrant an inference of an intention on the part of the railway company to dedicate, and the power of the Canadian Pacific Railway Company to do so in respect of the line of the Calgary and Edmonton Railway Company; and the Board should be furnished with evidence of the relations of these two companies respecting the line. I understand that the line is under lease to the Canadian Pacific Railway Company, which may have no power to dedicate any portion of the land of the Calgary and Edmonton Railway Company as a public highway, even if it could so dedicate a portion of its own land; and circumstances which would warrant the inference of a dedication by the company whose

officials are operating the railway, might be quite insufficient to warrant such an inference as against the lessor.

Towns and villages along the line of the Calgary and Edmonton Railway owe their existence to that railway. Necessarily they must submit to many inconveniences inseparable from such a situation. Where the Board exercises a discretionary power to determine at what points on such a railway street crossings shall be opened, it is obliged to consider the relative convenience of the public and the railway company as well as the public safety. The efficient operation of the railway is a matter of importance to the public generally and to the residents of the particular locality dependent upon it. It is particularly incumbent upon the Board to protect the public from the dangers attending such crossings; and in the performance of this duty, it must be on its guard against being too readily influenced by the insistence of those desiring relief from present inconvenience and led by self-interest to minimize the danger.

An examination into the position at High River indicates the importance to the community of a street crossing near the business centre of the town. It is admitted that the town was laid out by the original promoters of the railway, who, therefore, are in some measure responsible for the situation which has developed; and the company at present operating the railway must, for an application of the kind in question, be treated as affected by this responsibility. On this ground, it appears to me that there should be a crossing at Third street upon the terms agreed to by the town, which appear to afford reasonable compensation to the railway company. Under the circumstances of the town and the probability of its growth westward, the closing of Seventh street should not be insisted upon.

As regards Olds, the situation appears to be much the same. The convenience of the community, it appears to me, demands the crossing at Third street; but, for the present, I do not think that more should be allowed, or that the southern crossing offered by the railway company as a condition of being relieved of the crossing at Third street should be authorized.

At Didsbury, the promoters of the railway laid out the town site on one side of the railway only, retaining, in one block, land lying along the other side of the line. They held out no inducement to the growth of a town or village to the east of the railway. Such growth as has arisen there is upon land thus separated from the railway and the town on the western side. The village is much smaller than High River, and the importance of a crossing at a particular point is not so great. The public have not long been accustomed to regard the crossing at Hespeler street as an open one. If there were no question of the existence of a public highway at Hespeler street, but the case was submitted merely to the discretion of the Board, I would not be in favour of authorizing the crossing at that street. If the railway company will so place the warehouses on the east side of the track as to be convenient to the crossing at Waterloo street, that crossing should, in my opinion, sufficiently answer the needs of the village.

It does not appear that the village has full power to open highways. Apparently this power was not given by the ordinances under which it was constituted. We have been referred to a late statute of the province of Alberta, the terms of which I have not yet had an opportunity of learning. Unless the village has such power, I do not think that this Board can authorize the village to open a highway over the tracks of the railway company against the will of the company, although the Board might empower the company to open such a highway if it was willing to do so.

As to Leduc, I think that the company ought to open Main street, at least, unconditionally, leaving the question of protection for future consideration when the necessity arises. The company expressly indicated the crossing at Main street as open in answer to the application for the making of a crossing at Mill street. If the company is unwilling to do this, the matter is open to the same difficulty as in the case of Didsbury, though, upon its appearing that the locality has become incorporated as

a town, an order might be made. If, upon further consideration of the Didsbury application, it should appear to the Board that, without leave, the company could dedicate a strip across its land as a public highway, and the company is unwilling to allow the crossing at Main street as suggested, the village should have an opportunity of showing the existence of a public highway across the railway at that point.

Orders issued accordingly in the case of the applications of the town of High River and the town of Olds.

NOTE.—The parties have been asked to submit further arguments in writing in respect of the question of the power of a railway company to dedicate a portion of its right of way for use as a public highway without authority of the Railway Committee of the Privy Council, under the Railway Acts, previous to the establishment of the Board, or of the Board since its organization.

High River Case.

Judgment in concurrence, Mr. Commissioner Mills.

I cannot help feeling that when a company, running a line of railway through a locality, fixes upon a place for its station and lays out a town site on both sides of its tracks, providing for streets running through the town (across its railway), and prohibiting the people who may settle in the town and use the said streets, from crossing the said railway within the limits of the railway yard, varying in length from one-third to one-half mile or more, it (the said company) thereby creates an unreasonable and intolerable business condition, such as no class of people, whether living in the town or going there to do business, should be asked to submit to.

The unreasonableness of the prohibition above referred to is shown by the fact that in nearly every such instance the local railway officials allow people on foot to pass illegally across the railway tracks within the prohibited limits, as the members of the Railway Commission, their officials, and many others did on the day of the recent visit of the commission to the town of High River; and in not a few such places, vehicular traffic is allowed to pass illegally across the right of way and over the tracks within the prohibited limits, because the prohibition is felt and tacitly acknowledged by the railway officials themselves to be unfair, if not altogether indefensible.

For this intolerable business condition, the railway company is primarily responsible; and the people who, with knowledge of the facts, settle in a town where such a condition exists, are perhaps to some extent responsible, in so far as they thereby tacitly agree or consent to work and live where such condition is imposed.

Therefore, I am of opinion that, in such cases, some measure of relief should be granted, and that the railway company should bear, say, one-half of the expense of providing such relief.

All rail-level crossings involve more or less danger, farm crossings, highway crossings, street crossings over single tracks in cities, towns and villages, and street crossings over two or more tracks within the limits of railway yards, some close to stations and others at greater or less distance therefrom. Nevertheless large numbers of each of these kinds of crossings are found all over the country, because public opinion (the law-making power) long ago decided and still maintains that such crossings are absolutely necessary. I admit that rail-level crossings through a railway yard are specially objectionable and should be avoided as far as possible; but, on account of the intolerable condition above described, the need for such crossings has been so great that, notwithstanding the danger, they have been made in nearly every town or village (not to speak of cities) through which a railway passes in the older provinces; and it appears to me that the Board of Railway Commissioners, especially on account of the increased and ever increasing length of railway yards, is now and

will hereafter be under obligation to grant such crossings in response to reasonable applications and appeals by the business people of the country, until such time as there is special legislative provision for distributing and in some way defraying the expense of subways, overhead bridges, or other special forms of protection at many, if not most, of the crossings in our cities, towns and villages.

Further, rail-level crossings, especially crossings through a railway yard, cause a certain amount, possibly a considerable amount, of inconvenience to a railway company. This is admitted. Nevertheless I think it is manifest that such crossings must continue to be made until, as above suggested, there is special legislative provision for the construction of subways or overhead bridges at crossings which cannot be properly protected by the ordinary and less expensive methods. At present the question is who shall bear the inconvenience, the public or the railway companies? My opinion is, first, that the inconvenience should be equitably divided; and, second, that no class of people in any city, town or village should, in the transaction of business or the discharge of social or civil duties and obligations, be compelled to walk or drive unreasonably long distance in order to cross the right of way and track or tracks of any railway company.

In speaking of the Calgary and Edmonton Railway, I may say that I do not question the correctness of the statement that 'the towns and villages along the line of the Calgary and Edmonton Railway owe their existence to that railway'; but, I might ask, if it is not equally true that the Calgary and Edmonton Railway owes its existence and its manifestly profitable traffic to the said towns and villages and the trade of the farmers use the streets thereof.

I admit also that the Board should 'consider the relative convenience of the public and the railway company, as well as the public safety,' and should not forget that 'the efficient operation of the railway is a matter of importance to the public generally, as well as to the residents of particular localities dependent upon it'; but the experience of railway companies and of the public generally in the older provinces of the Dominion goes, I think, to show that the interests of neither the one nor the other have been seriously sacrificed by granting the residents of particular localities reasonable facilities for doing business on the opposite side of the lines of railway which pass through the cities, towns or villages in which they live.

I do not attach much importance to the insistence of those who seek relief, but I desire to give due weight to the facts in each case; and I never can bring myself to think that the board, on any mere theory of inconvenience to the railway company or from a desire to meet the wishes of the general public for more rapid transportation, is justified in allowing a railway company to create and maintain unreasonable or intolerable business conditions in any city, town or village through which it passes; and while I do not desire to minimize the danger of crossings through railway yards or elsewhere, I would venture the statement that most of the accidents on the railways in this country are due, not to crossings, but to collisions of various kinds on the railways, to carelessness or recklessness in shunting, which results in the death of so many railway employees.

Therefore, my opinion is that the municipality of High River should be authorized to cross the right of way and track or tracks of the Calgary and Edmonton Railway Company on Third street in the said town as soon as it obtains and transfers in fee simple to the said company, the plot of land agreed upon between the company and the municipality, all as per agreement between the parties; and that Seventh street, in the said town, should be kept open and maintained as heretofore for the use of the public in that locality.

November 10, 1906.

Didsbury Case.

Judgment in dissent, Mr. Commissioner Mills.

Findings—

That the Calgary and Edmonton Railway Company graded and planked the railway crossing on Hespeler street, Didsbury, Alta., opened the said crossing, and maintained it during a continuous period of about four years, for hauling freight to and from between the village on the west side of the railway and the freight tracks or sidings on the east side of the main line, and for general use by all who cared to travel to and from the east side of the railway, whether the residents of the village on the west side, the property holders on the east side, or the farmers and others in the country lying east, northeast, and southeast of the village.

That during the time that the crossing on the said street was in use, and without any kind of notice or intimation that it would ever be disallowed or closed, some seventy lots of lands were bought on the east side of the railway, in what is now called Lacknerville, or Didsbury East. These lots, it appears, were bought and some houses were built in good faith and under the undoubted impression that on Hespeler street there would continue to be, as there had been, a regular public crossing over the railway, open at all times for the use and convenience of those who might wish to pass to and fro between their property on the east side and their place of business in the village on the west side of the railway.

That the owners of the said lots, with or without houses, have vested rights which they acquired on the faith that the railway company would continue to do as it had done regarding the said Hespeler street crossing, which crossing the company had itself establish, maintained, and allowed the public to use without let or hindrance for a period of four years or longer.

Expressions of Opinion

No doubt the railway crossing on Hespeler street did, when in use, and will if restored, involve two things:

(1) Some danger to the travelling public in that locality.

(2) Some inconvenience to the railway company.

All rail-level crossings involve more or less danger—farm crossings; highway crossings; street crossings over single tracks in cities, towns and villages; and street crossings over two or more tracks within the limits of railway yards—some close to stations and others at greater or less distances therefrom. Nevertheless large numbers of each of these kinds of crossings are found all over the country, because they are regarded as absolutely necessary; and they must, in my opinion, continue to be made with or without protection and notwithstanding the danger, until such time as special legislative provision is made for defraying the cost of subways or bridges at crossings which involve serious risk. This, I take it, is the reason why the Railway Committee of the Privy Council allowed and legalized hundreds of more or less dangerous rail-level crossings on streets and through railway yards in the cities, towns and villages of the Dominion.

Further, every rail-level crossing, especially a crossing through a railway yard, causes a certain amount, possibly a considerable amount, of inconvenience to the railway company; and, after carefully considering the whole situation and circumstances, I am of the opinion that this inconvenience, like the danger above referred to, must continue until legislative provision is made for subways or overhead bridges at such crossings as cannot be satisfactorily protected by the usual means now in use. At present, the question is, who shall bear the inconvenience, the public or the railway companies? My opinion is that the inconvenience should be equitably divided; on the one hand, the railway companies should not be embarrassed by too many crossings

through their yards—municipalities should not, in some instances, be given all the crossings they ask for; and, on the other hand, no class of people in any city, town or village should, in the transaction of business or the discharge of civil and social duties or obligations, be compelled to walk or drive unreasonably long distances in order to get across the right of way and track or tracks of a railway company.

In my opinion, the aim of the Commission should be, not to restrict, hamper or embarrass the business community by refusing or closing such railway crossings as reasonable convenience demands, but to provide protection at dangerous crossings and endeavour to distribute as equitably as possible the cost of such protection.

The distribution of the cost of protecting a railway crossing must always depend upon the facts and circumstances: Who created the necessity for the crossing? Who is responsible for the facts and circumstances which have made the demand for the crossing a reasonable one? Who is or are served by the crossing—the railway company alone, the municipality alone, or both, or the railway, the municipality and the outside, surrounding public? What has caused the danger that makes the protection necessary—increased traffic on the railway, the running of fast through trains, or the growth of population and industries in the municipality?

I had stated my views *re* the distribution of the cost of protecting certain crossings in the village of Didsbury; but out of deference to the opinion of the Chief Commissioner, I decided to leave that question for future consideration—to be settled when the occasion arises—and shall deal only with the application for the reopening of the crossing on Hespeler street in the said village.

In reference to this application, I may say that, for reasons which were obvious, though not openly avowed at the hearing, the railway company did not, in the case of Didsbury, lay out and sell any portion of its land on the east side of its line of railway, and did not thus contribute to any inconvenience which might result from a lack of crossings over its railway in the village; but, as already stated, it laid out the village on the west side of its line, placed its freight shed and freight sidings on the east side of its line, and established a regular crossing over its tracks on Hespeler street in the said village. For a period of four years or longer, the said Hespeler street crossing was used, not only for the business of the company, but for all kinds of traffic —village and farm traffic alike—without let or hindrance from the company, or any kind of intimation that the said crossing would ever be closed; and the evidence shows that, under the impression that on Hespeler street there would continue to be, as there had been, a regular public crossing, a number of people bought lots on the east side of the line, some of them built houses there, in order to improve the road leading up to the crossing on the said street. Then, after a number of people had thus acquired rights on the east side of the railway, the railway company, without notice, closed the crossing on Hespeler street and opened another which it thought would better serve its purpose. This course of action by the company does not seem to me to be quite fair or reasonable; it might, perhaps, be described as arbitrary; and if the Railway Commission should approve of it as a fair and reasonable proceeding, it would, I think, thereby take a serious step towards establishing a new principle of law in dealing with the question of vested rights.

Therefore, my judgment is:

That the said Hespeler street crossing over the right of way and tracks of the Calgary and Edmonton Railway, in the village of Didsbury, in the province of Alberta, should be reopened and maintained as a regular public crossing over the said railway at that point; the grading on each side of the track or tracks to be maintained in good order by the village, and the planking, not less than twenty feet long, between and on the outside of each pair of rails, to be laid and kept in good condition by the railway company.

February 1, 1907.

SESSIONAL PAPER No. 20c

Re Queen's Wharf Crossing, Toronto.

This was an application by the Canadian Pacific Railway Company for an order to vary the order of the Railway Committee of the Privy Council, dated February 8, 1898, and the order of the Board, dated July 27, 1905, by directing that the entire cost of operation and maintenance of the diamonds, interlocking, derailing, and signal appliances at the Queen's wharf crossing, in the city of Toronto, of the applicant company's line of railway by the Grand Trunk Company's lines be borne by the two companies in the proportion which the total number of cars belonging to one company passing in any direction over the crossing bears to the total number of cars belonging to the other company passing in any direction over said crossing.

By an agreement between the two companies, the Grand Trunk Railway Company granted to the Canadian Pacific Railway Company running rights from the city of Toronto to the city of Hamilton, and by the agreement the expenses of maintenance of the tracks, &c., so used, and the other expenses connected with the operation of the section jointly used, were to be divided between the two companies upon a wheelage basis. The tracks so used are a portion of those crossing the Queen's Wharf spur of the Canadian Pacific Railway Company.

At the hearing (October 23, 1906), the applicant company claimed to be the senior company and to be entitled, on that account, to have the total cost of the protective appliances borne by the Grand Trunk Company.

The order of the Railway Committee of the Privy Council orally pronounced was that as the origin of the two companies was so close together in point of time, the committee was not called upon to determine the question of seniority, and that, therefore, each company should bear half the cost of construction, the cost of maintenance to be governed by the agreement.

It does not appear that any application was made by the applicant company to the Railway Committee for a change in the order, although there was some correspondence between the two companies in respect of the apportionment of the expenses between them.

Judgment, November 16, 1906.

Chief Commissioner Killam: It appears to me entirely too late to take the ground that the order orally pronounced by the committee was varied on a subsequent application of the Grand Trunk Company without notice to the Canadian Pacific Company. Such an objection should be raised at once upon the order coming to the notice of the complainant company. And it appears to me, also, that this Board should not now reconsider a decision of the Railway Committee upon the facts which were before it. It was the body established by law to determine such questions when the application came before it and when its order was made. The Railway Committee was a body whose membership was frequently changing. It would have been wholly unreasonable for that body to adopt the policy of changing its decisions with changes in the opinions of individual members of the committee. It would be equally unreasonable, it appears to me, for the new tribunal which has taken the place of the committee to substitute the individual views of its members for those of the former tribunal. It is true that the Railway Act gives to this Board authority to vary orders of the Railway Committee, as well as to vary its own orders; but such jurisdiction, it appears to me, should not ordinarily be exercised except under changed circumstances, or for the purpose of rectifying errors which appear to have occurred through want of information, oversight or otherwise. Even in the latter cases, application should be promptly made, as the facts respecting any alleged error or oversight are much more likely to be then ascertained.

When the application was before the Railway Committee it was, of course, unknown in what proportions the crossing would be used by the two companies, and there was very little before the committee which would enable it to judge the probabilities in this respect. But such must usually be the case.

I do not think that it would be reasonable or just to take up in this way individual cases in which it may appear that one company or the other is contributing an undue proportion of expenses of the kind in question, having reference to the respective proportions in which they use a crossing. If former orders of this kind are to be revised on such a principle, the general policy should first be determined upon, and a general inquiry made respecting at least all such as any railway company should desire to have considered. I doubt whether any company would derive from such a general inquiry an advantage which would recompense it for the expense and labour of engaging in it, and I doubt, also, whether the result would repay railway companies for keeping the necessary accounts respecting a number of crossings. If it is desired that the Board should take up the consideration of the adoption of such a general policy, it might be made a subject of discussion with the railway companies generally; but, in the meantime, it appears to me that the Board should not interfere with the order of the Railway Committee. The question whether, under the agreement between the two companies, the half ordered to be paid by the Grand Trunk Company should be charged against the expenses to which the Canadian Pacific Company has to contribute, is not a question, in my opinion, for this board to determine.

Re Crossings of Railway Companies by Transmission Lines of Power Companies.

By order of the Board of August 7, 1906, the Kaministiquia Power Company was granted leave to erect and maintain its transmission lines across the tracks of the Canadian Pacific and Canadian Northern Railway Companies' right of way at West Fort William, subject to the conditions set forth in the order, among which were the following:—

'1. That the applicant company, at all times, at its own expense, maintain, in good order and condition, the wires crossing the said railways so that at no time shall any damage be caused to the companies owning, operating or using the said railways, or to any person lawfully upon or using the same.

'2. That the applicant company, at all times, wholly indemnify the companies owning, operating or using the said railways of, from and against all loss, costs, damage and expense to which the said railway companies may be put by reason of any damage or injury to person or property caused by any of the said wires or any works or appliances herein provided for not being erected in all respects in compliance with the terms and provisions of this order, or if, when so erected, not being at all times maintained and kept in good order and condition, and in accordance with the terms and provisions of this order, as well as any damage or injury resulting from the imprudence, neglect or want of skill of any of the employees or agents of the applicant company.

'That no work, at any time, be done under the authority of this order in such a manner as to obstruct, delay or in any way interfere with the operation or safety of the trains or traffic on the said railways.'

The Canadian Pacific Railway Company applied for an order amending the said order, to provide that the erection, construction and maintenance of the said wires be wholly at the risk of the Kaministiquia Power Company, and the said company indemnify and save harmless the Canadian Pacific Railway Company 'of, from, and against all loss, cost, damage and expense from any cause whatsoever to which the applicant company may be put by reason of any damage or injury to person or property or otherwise resulting from the erection, construction, operation or maintenance of the said wires or any working appliances which may be provided in connection therewith.'

In support of this application, the Canadian Pacific Railway Company alleged that the construction, operation and maintenance of high potential wires across its right of way was a source of the gravest danger to it, its property, and to the property and persons of those using the railway; that the presence of the said wires,

even though properly protected so far as human foresight could provide, nevertheless meant that, in the case of an accident, whether due to exceptional causes or not, the resultant damage to the applicant company's property and that of third persons would be very far-reaching and was not a risk that should, under the circumstances, be assumed by the applicant company; that they should, therefore, be insured against any such loss, and requested that clause two of the order in question be amended in accordance with the application. The Canadian Northern Railway Company concurred in the application.

By agreement, written arguments were submitted upon the question thus raised. Express agreements had been entered into between some of the power companies and some of the railway companies affected respecting a number of such crossings and the protection to be provided thereat. These agreements were approved by the Board and orders issued accordingly. Among the provisions of such agreements are the following:—

'And the power company covenants and agrees that it will indemnify and save harmless the party of the first part, its agents, operatives and employees of and from any and all claims of every name, nature and description which shall be made against the railroad company or against such operatives or employees, by reason of any injury which shall come to any of them, or to the public, or to any property in transit upon such railway because of the operation of its transmission lines or any thereof under this grant and license, and whether such injury shall be sustained through the derailment of any locomotive or car of the railroad company or otherwise, it being intended that all the risk of all accidents incident or arising from the construction, maintenance or operation of such cables over the railroad of the railroad company, however occurring, shall be borne by the power company. The railroad company is to notify the power company in writing of any such claims or of any suit for the recovery of such damages, and the power company may with the support of the railroad company arrange with the claimant or defend such suits.

'All the work to be done by the power company or by its contractors, agents or servants in connection with the doing of the said work, or in connection with the repairs, renewals, or maintenance thereof, shall be done at the risk of the power company without expense to the railroad company.....

'The power company covenants and agrees to keep, abide, and perform all the terms and provisions hereof, and shall and will at all times indemnify and save harmless the railroad company of and from all loss and damage which may happen or arise, or be done, incurred or caused by reason of the construction, repair, renewal, maintenance or use of the said work.

'The railroad company shall not in any case be liable to the power company or to its contractors, agents or servants, or to the agents or servants of any such contractors, for any injury or damage to the person or property of the power company, or to the person or property of any of its contractors, agents or servants, or to the agents or servants of any such contractors which may happen, or be done, or caused by, or by reason of the doing of the said work, or during the repair, renewal, maintenance or use thereof; and the power company shall and will assume and does hereby assume all responsibility and liability for any and all such injuries and damages, whether caused by negligence of the railroad company, its agents or servants, or otherwise; and the power company shall and will indemnify and save harmless the railroad company, its successors and assigns, of and from all damages, claims for damages, demands, suits, recoveries, judgments or executions which may arise, or may be made had, brought, or recovered by reason of or on account of any such injuries or damages. And it also covenants and agrees to indemnify and save harmless the railroad company, its agents, servants and passengers of and from all loss, injury or damage to it or to its agents, servants, or passengers, which may happen or be done or caused

by reason of the doing of the said work, or by, or by reason of the repair, renewal, maintenance or use thereof, or by, or by reason of any failure to repair, renew or maintain the said work.'

The contention of the Canadian Pacific Railway Company was that the lines of the Kaministiquia Power Company were carried across land owned by the railway company; that no compensation had been given to it for this interference with its right of property; that the wires were to be used for the transmission of something from which there was great risk of injury; and that the railway company could not be compelled to bear any of the risk this occasioned while it arose from the default of the power company or from any source beyond the control of the power company.

The original application asked that the risk be thrown absolutely upon the power company, without providing for cases in which the injury might be due to the default or negligence of the railway company or its agents; but in the written arguments referred to, the railway company did not go so far, but suggested a clause which excepted from the liability proposed to be thrown upon the power company ' any loss or damage directly attributable to any act, default, or negligence on the part of the railway company, its agents or employees.'

Judgment, Chief Commissioner Killam, November 17, 1906.

It appears to me that the contentions of the Canadian Pacific Railway Company are well founded, and that it ought to be at no risk of loss arising from the placing of such wires across its right of way or the transmission of electric power thereon, excepting in cases in which the loss is primarily due to its default or that of those for whom it is responsible. Telephone wires over railway tracks cause a measure of physical obstruction, from which there is some possibility of danger. Contact between such wires and other wires may result in injury. But there is no such danger ordinarily attending their existence over railway tracks as in the case of wires transmitting high electric power. Usually, too, telephone wires are carried along highways and across railway tracks where the company does not own the land but has merely a right of crossing the highways; and it is not necessary, at present, for the Board to determine what orders shall be made where power wires cross a railway upon a highway.

It appears to me that the clause now suggested by the Canadian Pacific Railway Company as a substitute for clause 2 of the original order and of the draft of the order proposed to be made in respect of the power company's second application, is a reasonable one and should be adopted. The clause is as follows:—

' That the applicant company shall, at all times, wholly indemnify the railway company of, from, and against all loss, cost, damage, and expense to which it may be put by reason of any damage or injury to person or property or business caused by any of the said wires, lines, or any work or appliances herein provided for, or by the continuance or use thereof, whether caused by the same or any of them not being erected in all respects in compliance with the terms and conditions of this order, or if, when so erected, not being at all times maintained and kept in good order and condition and in accordance with the terms and provisions of this order, or otherwise howsoever caused, as well as of any damage or injury resulting from the imprudence, neglect or want of skill of any of the employees or agents of the applicant company; Provided, however, that the applicant company shall not be required to indemnify the railway company from and against any loss or damage directly attributable to any act, default, or negligence on the part of the railway company, its agents, or employees.'

The power company now alleges that it has constructed its work under the order of August 7, and that that order at least should not now be varied. It appears to me, however, that as the question is a new one and as it was raised so promptly after the railway company had received notice of the order made, the power company's objections should not prevail.

January 24, 1907. Upon the statements made in Mr. Montgomery's further communication of December 11, 1906, it appears that the Kaministiquia Power Company

has power to construct lines for the transmission of electricity upon and along highways. I understand that this is not disputed by the railway companies, although opportunity has been given for the purpose. This being the case, I think that the power company stands in the position of the telephone company, acting under the provincial order of the Board of Trade, referred to in the National Telegraph Company *v.* Baker (1893), chapter 186; and the Tramway Company, whose lines were constructed under statutory authority, referred to in Eastern and South African Telegraph Company *v.* Capetown Tramway Companies (1902), A.C. 381.

The lines authorized by the Board's order of August 7, 1906, are not constructed across the lands of railway companies, but along the highways in respect of which the railway companies have merely rights of crossing. Under those circumstances, it does not appear to me that the power company should be responsible for any injury except such as may arise from its negligence or that of its servants or agents, and, in respect of such, the railway companies need no protection by order of the Board.

I am, therefore, of opinion that we should not vary the original order in this case.

February 4, 1907. The Kaministiquia Power Company was incorporated by the legislature of the province of Ontario, from which it derives any authority that it may have to construct lines along the highways. With its action in this respect, this Board has nothing to do. The board is not asked to give the company any authority to carry its lines along the highways; but as it is doing, and has done, so in accordance with the right which it claims, and as these rights are not contested by the railway companies interested, we may assume for the purposes of the applications before us, that the power company's action is lawful.

As the Board has no authority to give or refuse leave to run along the highways, it does not appear to me that it should impose any condition to that being done. The company applied for leave to carry its wires across the tracks of the Canadian Pacific and Canadian Northern Railway Companies; and an order was made authorizing it to do so. The railway companies have since asked for the insertion of a condition throwing upon the power company the responsibility for any damage that may occur to the railway companies or those using the railways. Upon the grounds expressed in my memorandum of January 24, I do not think that such a condition should be imposed, as between the railway companies and the power company; and I think it best that we should simply refuse the applications of the railway companies, leaving the municipality and the public using the highways to such protection as is given by the provincial law.

In Re Canadian Pacific Railway Company and Grand Trunk Railway Company, Lennoxville Crossing Case.

Under an agreement between the Grand Trunk Railway Company and the International Railway Company it was agreed that the said International Railway Company should bear the cost of providing, maintaining, equipping and working an ordinary level railway crossing, together with all risk arising from such construction and operation. The agreement also contained the following provision: 'In the event of the government of this Dominion passing any Act whereby certain signals, interlocking switches, or other appliances shall be used on level railway crossings, it is hereby understood and agreed that the party of the second part' (being the International Company) 'will provide, work and maintain such at their own expense.'

Hearing, October 30, 1906.

Judgment, November 17, 1906.

Chief Commissioner Killam (6 Can. Ry. Cas., pp 78 *et seqo*): Held, that the said clause of the agreement should not be narrowly construed; that the Board had authority under the Railway Act, 1903, to order an interlocking system at this crossing for the protection of the public.

Ordered, that the Canadian Pacific Railway Company install, maintain, and operate the ordinary interlocking, derailing and signal system, at its own expense, at the said crossing.

Windsor, Essex and Lake Shore Rapid Railway Company Crossing, Talbot Street, in the Town of Essex.

The Windsor, Essex and Lake Shore Rapid Railway Company applied, under section 177 of the Railway Act, 1903, for leave to cross, at rail-level, with its track the track of the Michigan Central Railroad Company, on Talbot street, in the town of Essex.

After hearing and a personal inspection by the Board, and upon the report of its engineer, the Board, on May 25, 1906, made an order authorizing the applicant company to construct its line of railway across the track of the Michigan Central Railroad Company by means of subway at a point distant not less than 1,200 feet west of the proposed point of crossing on Talbot street.

Later, the applicant company asked for a further hearing of its application, claiming that it had not previously received notice that the Michigan Central Railroad Company proposed to urge the construction of a subway, and that it was not prepared with proper evidence upon that point; that, on account of the nature of the locality, a subway crossing was not feasible there.

The company was directed to formally apply to rescind or vary the Board's order; and upon a further hearing, and in view of the opinions expressed by the chief engineer of the Board, as well as by other engineers, the Board, by order, dated November 16, 1906, rescinded its previous order of May 25, 1906, directing the construction of a subway, and authorizing the crossing by the applicant company at rail-level, requiring:

(*a*) That the said crossing be protected by an interlocking plant known as the 'McSwain Interlocking Device'; derails to be placed on the applicant company's line of railway, on both sides of the said crossing; and the said derails to be interlocked with home and distant signals on the line of the Michigan Central Railroad Company;

(*b*) That the tracks of the Michigan Central Railroad Company be bonded to a point 400 feet beyond the distant signals;

(*c*) That the normal position of signals on the Michigan Central Railway be at 'safety,' and the derails open on the applicant company's line;

(*d*) That the plan showing the position of the derails and signals, the description of machinery to be provided, and other necessary details, be submitted to the engineer of the board for his approval;

(*e*) That a day and night watchman be appointed to take charge of the said interlocking plant, who shall also operate the gates at the said point of crossing throughout the whole twenty-four hours for the protection of those using Talbot street in the ordinary course, the said men to be appointed by the Michigan Central Railroad Company, the wages of one of whom to be paid by the applicant company, and the wages of the other by the Michigan Central Railroad Company.

At the later hearing it was urged by the Michigan Central Railway Company that, before the applicant company can be authorized to carry its track across the line of the Michigan Central Railroad Company, it must have its route and its location plans approved in the manner required by the Dominion Railway Act.

Judgment, Chief Commissioner Killam, November 20, 1906.

It does not appear to the Board that this is necessary. Apparently the provincial Act did not require approval of the route or location of the railway by an authority. As the Board held before, the requirement in the Electric Railway Act of Ontario that plans be filed with the provincial Minister of

Public Works was a condition only to the exercise of the right to expropriate land and not a condition precedent to the right to construct or operate the railway. The company's Act of incorporation, 1 Ed. 7, c. 92 (Ont.), provided that the railway might be carried along and upon such public highways as might be authorized by the by-laws of the respective corporations having jurisdiction over the same. It is not disputed that the necessary authority to run along the highways has been given by municipal by-laws. The original Act, as well as the Ontario Act of 1905, cap. 110, authorized the railway company to carry its line across the line of any other company on the level. Before the passing of the Dominion Act declaring the company's railway to be a work for the general advantage of Canada, the Board heard the application for a level crossing, and made an order authorizing the line to be carried underneath the Canada Southern Railway. The last mentioned Act provided that the Railway Act, 1903, and amendments thereto, with a certain exception, were to apply to the company and to its works, to the exclusion of the Electric Railway Act of Ontario or any provision of the Act incorporating the company or any amending Act inconsistent therewith, but provided that nothing therein contained should affect any action theretofore taken pursuant to the powers in such Acts. The application with which the Board has now to deal is one for a variation of the former order, so as to allow of the crossing being made at grade. The Board is of opinion that such an order may be made without approval of the route or the location of the railway under the Railway Act, 1903.

In accordance with the report of the engineer, the Board decided to refuse the application of the Windsor, Essex and Lake Shore Rapid Railway Company for permission to cross the Michigan Central Railway on Talbot street, in the town of Essex, and, instead, to grant the said company permission to construct a subway under the main line of the Michigan Central Railway in the southwestern part of the said town, and to carry its line at rail-level over the tracks of the Amherstburg branch of the Michigan Central Railway.

From this judgment, Mr. Commissioner Mills dissents as follows:—

Whereas steam railway companies have been and still are permitted and authorized to carry their lines of railway, even those on which are the heaviest traffic and fastest trains, across one another at rail-level in all parts of the country;

Whereas the ordinary derailing and interlocking appliances now used by railway companies were approved and ordered by the Railway Committee of the Privy Council and have frequently been approved and ordered by the Railway Commission as affording sufficient protection to the public where one steam railway crosses another at rail-level;

Whereas, by the junction of the block system in use on the Michigan Central Railway with the ordinary derailing and interlocking appliances and the use of the gates and electric bell now maintained by the Michigan Central at the said crossing on Talbot street, the protection could, in my opinion, be made more perfect and complete than anything yet ordered by the board;

Whereas the construction of a subway at the point suggested will necessitate such an abrupt, long, and to my mind unreasonable diversion of the electric line as no municipality would permit—much less propose—in the case of a highway for ordinary vehicular traffic;

Whereas the proposed diversion of the electric line in the town of Essex will involve the making of two crossings instead of one, one by a subway under the main line of the Michigan Central Railway where it is impossible to get drainage, and the other at rail-level by the use of a diamond and derailing appliances on the Amherstburg branch of the Michigan Central Railway; and

Whereas interurban electric railways, intended especially to meet the wants of the farming community by carrying passengers for short distances and collecting

scattering freight in small quantities throughout the rural sections of the country, receive no bonuses from the Dominion government, local governments, or municipalities, and consequently are unable to bear the cost of expensive subways or overhead bridges such as the heavy subsidized steam railway companies may be able to provide;

Therefore, I have to dissent from the above judgment, on the ground that in my opinion, the proposed diversion of the electric line, with all that it involves, is unnecessary, unreasonable and oppressive—not necessary for the protection of the travelling public, not even efficient for that purpose, as it proposes and involves a level crossing of a regular line of steam railway, at rail-level, with very much less complete and effective protection than could and would be provided at the crossing on Talbot street; unreasonable, because of the length and abruptness of the diversion, which, by the creation of a steep grade and three or four right-angle curves, will greatly diminish the hauling power of the electric line; and oppressive, because it imposes on the Electric Company heavy expense for the purchase of a new right of way through a good and well-peopled part of the town, the burden of an expensive subway where drainage cannot be obtained, and the outlay necessary for a diamond and protective appliances at a rail-level crossing over the Amherstburg branch of the Michigan Central Railway.

May 26, 1906.

Judgment in concurrence, Mr. Commissionner Mills.

This is an application by the Windsor, Essex and Lake Shore Rapid Railway Company, an electric road, to cross the tracks of the Michigan Central Railway, at rail-level on Talbot street, in the town of Essex, Ontario.

After considering the evidence submitted, the arguments of counsel, the report of the chief engineer of the Board, and the whole situation and facts of the case as set forth at the hearings in Windsor and Essex, I may state briefly my opinion on two or three points:—

1. That if a subway off at Talbot street (as proposed), with all the difficulties regarding drainage, were insisted upon, a very heavy, if not altogether intolerable, burden would be imposed upon the applicant company; and the danger to the travelling public in that locality would be greatly increased beyond what it now is, by adding a rail-level crossing of the electric road over the Amherstburg branch of the Michigan Central Railway to the rail-level crossing which now exists (and will continue to exist) for vehicular and pedestrian traffic on Talbot street. In fact, we might fairly say that two things would follow: the applicant company would be burdened, possibly bankrupted; and the danger to the travelling public would be doubled —without any compensating advantage, except in the matter of convenience to the main line of the Michigan Central Railway.

2. That the proposed subway, with its five per cent grade, would greatly hamper and injure the electric road in its freight traffic.

3. That if a rail level crossing by the electric road over the tracks of the Michigan Central Railway on Talbot street, where a crossing protected by gates now exists for vehicular and pedestrian traffic, is granted, and stipulation is made that the most perfect form of protective appliances for such a crossing are installed, connected with the gates now in use at that point, and all (the new protective appliances and the gates) operated night and day by men chosen and controlled by the Michigan Central Railway,—if, say, all this is done, there will be only one rail-level crossing instead of two; the Michigan Central Railway will be well served; the electric company will not be embarrassed either by heavy capital outlay or in the operation of its line of railway; and above all the danger to the travelling public will be very much less than it would be with a subway and two level crossings one partially protected and the other with little or no protection.

Therefore I can only re-affirm my judgment of May 26, 1906, and concur in the conclusion to-day reached by my colleagues, the Chief and Deputy Chief Commissioners.

November 20, 1906.

Re Kaladar Drainage.

The facts are fully set forth in the judgment of the Chief Commissioner.

November 20, 1906, Chief Commissioner Killam:

The Canadian Pacific Railway Company applied to the Board for an order authorizing the company to construct a ditch upon and across certain specified lands according to a plan submitted with the application.

The lands in question consisted of certain lots in concessions three and four of the township of Kaladar, and in concession two of the township of Sheffield, owned by different private individuals, only one of whom, James Murphy, has made objection to the construction of the drain through his land or the granting of the order.

The railway actually intersects all the lots except Murphy's, the nearest portion of which is distant several hundred feet from the line of the railway, and is separated from the railway company's property by the lands of other private owners which actually adjoin the railway.

The applicant company relies upon the powers given by subsections (*m*), (*p*) and (*q*)of section 118 of the Railway Act, 1903:

'(*m*) make drains or conduits into, through, or under any lands adjoining the railway, for the purpose of conveying water from or to the railway;

'(*p*) from time to time to alter, repair or discontinue the before-mentioned works or any of them, and substitute others in their stead;

'(*q*) do all other acts necessary for the construction, maintenance and operation of the railway.'

On behalf of Murphy it has been argued that section 196 makes it the duty of the company to make and maintain sufficient ditches and drains along each side of the railway for the purposes of any necessary drainage; that this method is the only one that can be used after the railway has been completed; that this railway has been completed and in operation for many years, and any powers of expropriation of land, or of the use of adjoining lands for purposes of drainage, have been exhausted and cannot now be resorted to; that drainage by means of ditches along the railway has been found to be sufficient for the maintenance of the railway, as evidenced by its use for so many years; and that Murphy's lands were not 'lands adjoining the railway' within the meaning of subsection (*m*) of section 118.

Section 196 provides that 'the company shall in constructing the railway make and maintain suitable ditches and drains along each side of, and across and under the railway, to connect with ditches, drains, drainage works and water courses upon the lands through which the railway runs, so as to afford sufficient outlet to drain and carry off the water, and so that the then natural, artificial or existing drainage of the said lands shall not be obstructed or impeded by the railway.'

This clause is evidently inserted for the purpose of imposing upon the company the duty of instituting such a system of drainage along its tracks as will prevent the interference of its works with the drainage of the lands of others. It is not intended to indicate the powers which the company may exercise for the proper construction and maintenance of its railway. These powers are found in section 118, and among them are powers from time to time to alter, repair or discontinue the works previously referred to and to substitute others in their stead, and to do all other acts necessary for the construction, maintenance and operation of the railway.

Under these powers it appears to me that, when a system of drainage established upon the construction of the railway is subsequently found to be insufficient improve-

ments may be made therein and such further drainage works executed as will assist in keeping the railway in an efficient condition and relieve it from the danger of injury by water. And I think that, for this purpose, the company may avail itself of the power contained in subsection (*m*) to make drains into or through lands adjoining the railway.

We have been referred to the case of Kingston and Pembroke Railway Company v. Murphy, 17 S.C.R. 582. In that case it was considered that a railway completed according to its charter could not be farther extended and lands compulsorily taken for the purpose. It should be noted, however, that that case was decided under the Railway Act of 1879, 42 Vic., c. 9, which did not contain the provisions of subsection (*p*) and (*q*) before-mentioned, and that what the company there sought to do was to construct an extension of its railway, not to alter or repair the works of its existing railway.

The natural meaning of the word 'adjoining' is lying next to or in contact with; contiguous. Such is the sense usually ascribed to it by the courts. See I Bouv. L. Dict. 93, 1 Am. and Eng. Enc., pp. 635-8; 1 Cyc. 765; Rex. *v.* Hodges, M. and M. 341; Josh. *v.* Josh, 5 C.B.N.S., 454; Lighthound *v.* Higher Bebington Local Board, 14 Q.B.D. 849. Numerous United States authorities are cited in the dictionary and encyclopedias just mentioned. But, just as in the case of other words, when it is apparent from the context and subject-matter dealt with that the literal meaning of the word would defeat the purpose of the legislature, it must be assumed that the word was used in a different sense. Moore *v.* Phœnix Insurance Company, 64 N.H., 140, 6 Atl. Rep. 27; Marsh *v.* Concord Mut. F. Ins. Co., 71 N.H. 253, 51 Atl. Rep. 898. See also L. & S.W.R. Co. *v.* Blackmore, L.R. 4 H.L. 610, 39 L. J. Ch. 713; Coventry *v.* L.B. & S.C.R. Co., L.R. 5 Eq. 104; Bateman *v.* Parker (1899) 1 Ch. 599; Hobbs *v.* Mid. R. Co., 51 L.J. Ch. 234; Ind. Coope & Co. *v.* Hamblin, 81 L.T. 779, 48 W.R. 438.

The general principle is best stated in the language in Maxwell on Statutes, 4th Ed., p. 78. 'The words of a statute are to be understood in the sense in which they best harmonize with the subject of the enactment and the object which the legislature has in view. Their meaning is found not so much in a strictly grammatical or etymological propriety of language, nor even in its popular use, as in the subject or in the occasion on which they are used and the object to be attained.' See also Beal on Cardinal Rules of Interpretation, p. 34; The Dunelm, 5 P.D. 171 and Wakefield Local Board *v.* Lee, 1 Ex. D., at p. 343.

The statute authorizes the construction of drains into adjoining lands. It is obvious that it must be necessary in many instances to find outlets for the drains or ditches along the sides of the railway tracks, and for this purpose to carry drainage works out of and beyond the land used for the railway right of way according to the natural configuration of the ground. In authorizing the carrying of drains through or under adjoining lands the legislature must have contemplated that the drains should leave the boundary line between the company's lands and those of other owners; and it must have contemplated that the distances to which they would be carried would differ according to circumstances. And it appears to me that the legislature could not have had in view the ownership of the particular parcels or strips of land through which it would be necessary to carry such works. Having once adopted the view—which, as it appears to me, is the necessary view—that under subsection (*m*) the railway company was authorized to carry drains away from the point of contact and into lands of others. I think that it necessarily follows that the power to carry the drains as far as might be reasonably necessary to effect the purpose for which they were to be constructed was included. Naturally such drainage works must be adapted to the formation of the land. It would be unreasonable to suppose that they were to stop at the boundary of the owner of the land next adjoining the railway, leaving the water to run as it would thereafter. In my opinion, ownership should not be treated as an element in determining whether or not the lands are 'lands

adjoining the railway' for the purposes of a case such as that with which we are now dealing.

After consideration of the report of one of the assistant engineers of the Board and the evidence taken upon the hearing, the chief engineer of the Board has reported that he is 'of opinion that the sooner the water is taken away from the railway at this point the safer it will be for the railway embankment, and that this is necessary for the proper maintenance and operation of the railway.'

Under the amending Act passed at the last session of parliament, the Board is empowered to make an order giving its sanction or approval to any matter, act or thing sanctioned by the general Railway Act. It does not appear to me that the company needs any sanction or approval from the Board to enable it to exercise the power contained in subsection (*m*) of section 118; but it is convenient that it should submit to the Board proposals for the construction of any such works in order that the Board may exercise some control as to the nature of the works and for the protection of other parties.

The evidence shows that the portion of Mr. Murphy's lot which would be cut off by the proposed drain is of little, if any, value, and that no serious injury would be done to the remainder of his land by the proposed work.

I think, therefore, that the order should go sanctioning and approving the construction of the drain as indicated by the railway company, with a condition that the railway company is to construct and maintain a suitable crossing over the drain for Mr. Murphy at such place and in such manner as shall be approved by an engineer of the board.

Re Express Companies' Contract Forms.

Section 27 of the Act 6 Edward VII., chapter 42, amending the Railway Act of 1903, gave the Board certain jurisdiction respecting express companies and the carriage of goods by express.

Under subsection 10 of that section, certain contracts for carriage by express are not to have any force or effect until first approved of by order or regulation of the Board.

By section 11 any such contracts lawfully in use at the time of the passing of the Act were allowed to be continued to be used and to have effect until November 1, 1906, or until such later date as the Board might by order in any case, or by regulation, fix and limit. Before the said November 1, 1906, a number of express companies submitted forms of contract used by their respective companies with a request for their approval.

Upon an examination and consideration of these forms, the Board decided to extend for six months from the said November 1, 1906, the time within which the forms previously in use could be used by express companies, or for carriage by express, and did extend the time as aforesaid by regulation dated November 13, 1906, with the qualification that the regulation should 'not have the effect of authorizing any company, person, or corporation, after approval of its or his tariffs of tolls by the Board under the provisions of the said Act, to contract or collect in or under any transaction or contract any express toll or tolls within the meaning of the said section 27 higher than the toll or tolls set out in the tariffs so approved, applicable to such transactions or contract.'

Re Express Companies' Tariffs.

Section 27 of the Act, 6 Edward VII., chapter 42, amending the Railway Act, 1903, applies to tolls or charges for the carriage of express matter, either wholly or partly in Canada and between points in Canada and points in the United States by

any one company, and the provisions of the Railway Act, 1903, with reference to joint tariffs, are applicable to tariffs of express tolls under the amending Act.

Chief Commissioner Killam, November 29, 1906.

CLAIMS AGAINST RAILWAY COMPANIES.

The Board has no jurisdiction to compel the railway company to pay for loss of cattle killed or injured by its trains, or for property burned by fires kindled by locomotives, as the statute expressly provides that relief in such matters is to be obtained by action in a court of competent jurisdiction. The Board, however, has jurisdiction to compel the company to put in proper cattle-guards and highway approaches, where it is the company's legal duty to do so.

Chief Commissioner Killam, November 30, 1906.

Re Rounding off Passenger Tolls.

Section 258 of the Railway Act, 1903, provides '.....; and in estimating the tolls to be charged in passenger tariffs any fraction of five cents less than two and a half cents shall be waived by the company, and above two and a half cents and up to five cents shall be considered as five cents by the company.'

The question was whether, when a special tariff is made up at less rate per mile than the standard tariff rate, the railway company is obliged to apply the principle laid down in the part of the section quoted.

Chief Commissioner Killam, December 3, 1906.

It does not appear to me that a railway company is so bound. Provided the standard rate is not exceeded and the clauses respecting discrimination and other provisions of the Act are not infringed, a special tariff may be made up either upon a uniform mileage rate or otherwise. Even if made up in general upon a mileage rate less than the standard rate, the company may violate that principle in some cases, and make the rates between certain stations upon another basis, arbitrary or otherwise.

I am, therefore, of opinion that a special tariff can be made without attention to the provisions of section 258, provided the fares are expressed in whole, not fractional, multiples of 5 cents. For instance, if a special tariff is made up at a rate of 2 cents per mile for a line where the standard rate is 3 cents per mile, 25 cents may be charged, instead of 22 cents or 20 cents for a journey of 11 miles.

Re Neelon Highway Crossing.

The Railway Act, 1903, does not empower the Board to order or compel a railway construction of a highway across the railway; such leave may be given to the railway company to construct a highway crossing over its railway where no highway has previously existed. The power of the Board in such a case is merely to *give leave* for the company, in which case it will be at liberty, but not obliged, to construct the crossing, or leave may be given to the municipal, or other body, having authority to open up a highway across private property without the consent of the owner. In the latter case the railway company is no more under obligation to bear the expense than a private owner would be.

Re James Bay Railway Company's Application to Cross Grand Trunk Railway Belt Line on Robert Davies' Property

This application came before the Board as the result of an agreement between the two companies made on the hearing of the two actions for injunction between the

two companies in the High Court of Justice for Ontario The agreement was that the James Bay Railway Company should apply to the Board for leave to make the crossing, and that on this application the Board was to decide 'which railway is bound to cross the other, and on what terms, and at whose expense the crossing is to be made.'

The evidence before the Board showed that, before the lodging of the application and before the agreement for making it, the James Bay Railway Company had entered upon the property under a warrant of possession and constructed its tracks across the spur in question, although met with forcible opposition by the Grand Trunk Railway Company.

The Board decided that it was unnecessary for the James Bay Railway Company to make any such application, and treated the track on the Robert Davies' property at the point of crossing as not being a railway line or track of another company within the meaning of section 177 of the Railway Act, 1903, but as being personal property, or, if real estate, as the property of Robert Davies, and made an order giving leave to the James Bay Railway Company to construct its line of railway across the spur track in question without putting in a diamond or otherwise providing for the operation of the spur by the Grand Trunk Railway Company across the line of the James Bay Railway Company, and without compensation to the Grand Trunk Company, thus leaving Davies to get such compensation as he might be entitled to under the Railway Act.

The Grand Trunk Railway Company applied to the Board for leave to appeal from this order upon the following grounds:—

'1. That the tracks of the Grand Trunk at the point in question is a railway line of a company, for the crossing of which by the tracks of the James Bay, leave of the Board is required under section 177 of the Railway Act.

'2. That leave of the Board was not necessary in order to enable the Grand Trunk legally to construct (at the point of crossing) the line of railway in question.

'3. That the Grand Trunk Railway Company has an interest in the land at the point in question as against the James Bay, and the James Bay cannot legally use or occupy such land without the leave of the Board.'

Judgment, Chief Commissioner Killam, December 3, 1906.

Held, that if these questions or one of them should be answered in the affirmative, the James Bay Railway Company could not lawfully have placed its tracks over the site of the spur in question without leave of the Board, and that such leave would not have been given upon the terms embodied in the Board's order. Either a diamond should have been inserted, and the proper method of protection at the crossing determined, or some compensation should have been awarded under section 137 of the Railway Act, 1903.

Leave to appeal upon the following grounds granted:—

1. Did the railway tracks from and connecting with the Belt Line railway constitute, where such tracks crossed the approved location of the James Bay Railway over Robert Davies' property, a railway line or track of a company, leave to cross which by the line of the James Bay Railway Company was required under section 177 of the Railway Act, 1903?

2. Could the Grand Trunk Railway Company of Canada legally construct the said railway tracks on Robert Davies' property at the point of crossing by the James Bay Railway Company, without the leave of the Board?

3. Had the Grand Trunk Railway Company, when the James Bay Railway Company constructed its line of railway across the said railway tracks on Robert Davies' property, such an interest in the land occupied by such railway tracks at the said point of crossing as against the James Bay Railway Company that the James Bay Railway Company could not lawfully use or occupy such land without the leave of the Board?

Re Canadian Pacific Railway Spur to Great West Development Company's Premises.

Winnipeg

Judgment, December 5, 1906.

Chief Commissioner Killam:

The Canadian Pacific Railway Company should be asked for some evidence that the proposed spur is necessary in the public interest, or for the purpose of giving increased facilities to business. (Under subsection 4 of section 175 of the Railway Act, 1903.)

Where a body like a city or town consents to the construction of a spur line, the Board frequently takes this as sufficient, or it may consider that the nature of the locality to be served, or some other circumstances, afford sufficient prima facie evidence to satisfy the statute. In the present case there is nothing. We do not know what the Great West Development Company is. It may be only a speculative real estate company; and as the city of Winnipeg does not consent and shows some reluctance to consent to the construction of the spur, there should be some evidence to satisfy the statute.

Station Sites.

By section 256 of the Railway Act, the location of station must be approved by the Board, and in case of a railway which, since July 18, 1900, has been granted a subsidy in money or land by the parliament of Canada, the railway company is required to maintain and operate a railway station or stations, with such accommodation or facilities therewith as are defined by the Board, at such point or points on the railway as are designated by the Board's order; and in any case, every station of a railway company is required to be erected, operated, and maintained with good and sufficient accommodation and facilities for traffic, a provision which, under its general jurisdiction, the Board is authorized to enforce.

The view the Board has taken is that the approval by the Board of location plans which appear to leave spaces for station sites, does not satisfy the provisions referred to, requiring that the locations of stations be approved by the Board, but there must be separate orders expressly approving such sites.

Chief Commissioner Killam, February 11, 1907.

Re Jacob Wright's Farm Crossing.

This was an application by Jacob Wright for a farm crossing over the line of the Canada Southern Railway Company on lot 29, concession 5, in the township of Enniskillen, in the county of Lambton, Ontario.

Wright is the owner of lands on both sides of the railway. The engineer of the Board reported that the applicant had no farm crossing and that the only way to reach the portion of this land lying to the north of the railway was by way of his neighbour's lands, north of the concession line, necessitating a long and out of the way route.

It appears that when the railway was built the lands were owned by the Crown, but were subsequently surveyed and sold to the original owners. The contention of the railway company is that the lands were surveyed and obtained before the construction of the railway but that the right of way across the lot was conveyed to the company without reservation before Wright acquired the land on each side of the railway; that under its original Act of incorporation it was not bound to grant farm crossings to the owners of lands adjacent to its right of way; that the subsequent legislation does not impose upon the company that liability; and that, while not admitting the jurisdiction of the Board to require the making of the farm crossing for the applicant, the company expresses its willingness that such an order be made

upon the terms of the applicant bearing the cost of construction and maintenance and paying such sum as the Board thinks reasonable and proper for the privilege, taking into consideration the attendant liabilities in connection therewith.

In the similar case of the Ontario Lands and Oil Company v. Canada Southern Railway Company, 1 Ontario L. R. 215, Meredith, J., decided that the railway company was not bound, under its Act of incorporation and the general Railway Act in force when the railway was built, to grant farm crossings, and that the Dominion Railway Act of 1888, which was enacted after the construction of the company's railway, did not apply to cases in which the railway had been previously constructed on land conveyed to the company and the owner of adjoining land had purchased subsequently to such conveyance, as, in his opinion, the railway could be said to be carried over the land of a person where such person did not acquire the property until the railway was constructed.

Chief Commissioner Killam:

I agree with Meredith, J., in thinking that the decision of the Supreme Court of Canada, in Vezina v. the Queen, 17 S.C.R., 1, conclusively established that, under the general Railway Act in force when the Canada Southern Railway Company was incorporated and when its line was constructed, a company was not bound to grant farm crossings over its line where a right thereto was not reserved in the grant or otherwise agreed to by the company; and I am also of opinion, with him, that where, prior to the passing of the Act of 1888, a person had acquired lands on opposite sides of a railway across which his predecessor in title had the right of way of crossing, the Act of 1888 did not operate to give that right to the new owner. In my opinion, also, the Act of 1888 cannot properly be construed retroactively so as to apply to a railway previously constructed on lands vested absolutely in the company. Section 190 of the Act of 1888 provided—as did section 198 of the Act of 1903—that 'every company shall make crossings for persons across whose lands the railway is carried, convenient and proper for the crossing of the railway.' &c. According to my interpretation, this provision is applicable only to cases in which the railway has been carried across a person's land since the enactment of the Act of 1888. I have formed this opinion after consideration of the jurisprudence in the province of Quebec, and particularly the cases of Bolduc v. Canadian Pacific Railway Company, Q.R. 23 S.C. 238, the Grand Trunk Railway Company v. Huard, Q.R. 1 Q.B., 501.

For the purposes of the application, therefore, it does not appear material to ascertain whether the railway was constructed before or after the grant from the Crown. I think that the applicant has no absolute legal right to the crossing, and that it can be granted by the Board only in the exercise of the discretion given by section 253 of the Railway Act (subsection 2 of section 198 of the Railway Act, 1903), which provides as follows: '.....'

Under the report of the engineer I think that we may properly find that the crossing is necessary for the proper enjoyment of the applicant's land on either side of the railway, and that it would be safe in the public interest; but as such an order is one to which the applicant is not entitled of right, and as it would have the effect of creating an easement over property which belongs absolutely to the railway company, and would involve some danger to the company's trains, any expense of construction and maintenance should be borne by the applicant, and the company should receive reasonable compensation.

Deputy Chief Commissioner Bernier expressed the view, in which Mr. Commissioner Mills concurred, that the railway company should undertake to open, construct and maintain a farm crossing at its own expense; and under the ruling of the Chief Commissioner that the Board has jurisdiction to make an unconditional order requiring the railway company to construct the farm crossing in question, although

he did not depart from his previously expressed opinion, the order issued February 15, 1907.

Judgment in concurrence, Mr. Commissioner Mills.

From the report of an engineer of the Board in this case, it seems clear that Mr. Wright's application for a farm crossing should be granted; and the only question is, at whose expense is the crossing to be made and maintained.

After full consideration of the principle involved and its wide application to Crown and Company lands in the western provinces and elsewhere, I am of the opinion that farm lands everywhere, actually occupied or to be occupied, carry with them the right of free passage (saving natural obstacles) from any one part of a lot to any other part of the same lot, which lot is or is to be occupied and worked as a farm; and that when a railway company or other corporation, for its own purposes and advantages, infringes upon this natural and fundamental right, it should do so with the clear understanding that it will, when constructing its line or at some later date, be compelled to provide and thereafter maintain, at its own expense, at least one adequate and satisfactory farm crossing on every lot or farm which it crosses.

Therefore, I concur in the judgment of the Deputy Chief Commissioner, that the Michigan Central Railway Company, as the successor of the Canada Southern Railway Company, should provide and maintain, at its own expense, an adequate and satisfactory farm crossing, at a point to be agreed upon, on the farm of Jacob Wright, known as lot 29, con. 5, in the township of Enniskillen, county of Lambton, Ont.

Re Complaint of the Dominion Concrete Company, Limited.

This company applied for an investigation by the Board into the matter of the Canadian Pacific Railway Company's rate of 12 cents per hundred pounds on concrete blocks from Kemptville, Ont., to Graham station, a distance of 107 miles, as against a rate of 6½ cents per hundred pounds on brick, and alleging an unjust discrimination in favour of the latter commodity and against the former.

This matter was taken up by the chief traffic officer of the Board, and after considerable correspondence with the railway company the rate on concrete was reduced and made satisfactory to the complainants. After the lower rate had gone into effect complainants claimed to be entitled to a refund of the difference between the higher and the reduced rate. The railway company refused to recognize any such claim and the complainants applied to the board for an order directing a refund.

Judgment, Chief Commissioner Killam, March 5, 1907.

Under the Railway Act a railway company is required to obtain approval of what are called standard tariffs specifing the maximum mileage rates which the company is authorized to charge, and upon approval of such tariffs, the company is authorized to charge the rates set out therein, unless it files special tariffs giving lower rates than those in the standard tariff; and section 327 of the Railway Act provides that, when a railway company's standard freight tariff has been approved and published, the tolls specified therein—except where other tolls are provided for by special or competitive tariffs—are the only tolls which the company is authorized to charge for the carriage of goods; and, by section 401 of the Railway Act, 'any person or company, or any officer or agent of any company, (*a*) who shall offer, grant or give or shall solicit, accept, or receive rebate, concession, or discrimination in respect of the transportation of any traffic by the company, whereby any such traffic shall, by any device whatsoever, be transported at a less rate than that named in the tariffs then in force..... shall for each offence be liable to a penalty not exceeding one thousand dollars and not less than one hundred dollars.' The authority of the Board

to deal with tolls and tariffs, as set out in section 323 of the Railway Act, is as follows: 'The Board may disallow any tariff or any portion thereof which it considers to be unjust or unreasonable, or contrary to any of the provisions of this Act, and may require the company, within a prescribed time, to substitute a tariff satisfactory to the Board in lieu thereof, or may prescribe other tolls in lieu of the tolls so disallowed.

'2. The Board may designate the date at which any tariff shall come into force.'

Held, that this does not empower the Board to make retroactive alteration in a tariff which is not contrary to any of the provisions of the Railway Act, so as to apply the alteration to past transactions; and that the railway company is not entitled to make rebates from tolls which have been charged in accordance with the tariffs lawfully existing when the transaction took place.

Held, further, that the Board has no authority to direct the Canadian Pacific Railway Company to refund any portion of the tolls charged by it under the tariffs existing before March 20, 1906.

A later application was made by complainants against this ruling of the Board, and it was argued that as the Board had power to designate the date at which any tariff should come into force, this could be done so as to give the same a retroactive effect.

Held, Chief Commissioner Killam, March 20, 1907, that the power of the Board to designate the date at which a tariff shall come into force does not enable the Board to give such tariffs a retroactive effect, and to make them applicable to prior shipments.

Discrimination.

Railway companies have no right to discriminate in regard to passenger rates as between passengers arriving at Canadian ports by different steamers. By sections 315 of the Railway Act tolls are required, under substantially similar circumstances and conditions, to be charged equally to all persons and at the same rate in respect of all traffic of the same description, and carried in or upon the like kind of cars, passing over the same portion of the line of railway; and that no reduction or advance in any such tolls shall be made, either directly or indirectly, in favour of or against any person or company travelling upon or using the railway.

Chief Commissioner Killam, March 7, 1907.

(Immigrant Passenger Tariffs.)

Re Complaint Brown Brothers Company v. Canadian Northern Railway Company.

The complainants alleged that on May 2, 1906, they delivered to the Canadian Northern Railway Company at Warman, Alberta, two boxes of nursery stock, consigned to L. H. Daly, of Vegreville, Alberta, and that the shipment proved a total loss to them, occasioned by the neglect or refusal of the railway company to carry and deliver the traffic without delay.

It appeared from the answer filed on behalf of the railway company to this complaint that a period of fifteen days had elapsed from the time of receipt at Warman Junction until their arrival at Vegreville, a distance of 262 miles, and the railway company was advised that the Board felt that, under the circumstances, it should take into consideration the Brown Brothers Company's claim for damages, and that such steps should be taken as would prevent the recurrence of such delays.

Held, Chief Commissioner Killam, March 12, 1907, that, under the Railway Act, the Board has not power to award compensation to parties for delays in forwarding traffic, as the Act expressly provides that the remedy is to be had by action in the ordinary courts; that the function of the Board is to require the furnishing of accommodation and the forwarding of traffic without delay, while the circumstances admit

of the Board interfering; but that, in case of a transaction which is closed, the Board can only deal with it as showing the necessity for action to prevent such delays in the future.

Re Complaint of Canadian Canners, Limited.

This was a complaint by the Canadian Canners, Limited, that the Canadian Pacific Railway Company charged a rate of 33 cents per 100 lbs. on a carload of canned goods shipped from Wellington, Ontario, to Sturgeon Falls, Ontario; or 4 cents per 100 lbs. more than the combination of the local rates from Wellington to North Bay and from North Bay to Sturgeon Falls.

Upon the application of the complainants, the railway company refused to refund the difference between the published rate of 33 cents and the combination of local rates, on the ground that it would be illegal to protect other than the published tariff rate, namely, 33 cents per 100 lbs.

The application to the Board is for authority to make the refund.

Judgment, Chief Commissioner Killam, March 12, 1907.

Held, that, not only would the railway company be justified in refunding the difference between the fifth-class rate from the point of shipment to Sturgeon Falls and the sum of commodity rate to North Bay, and the fifth-class rate from North Bay to Sturgeon Falls, but that it ought to do so. The later two rates are those of lawfully published tariffs; and a shipper has the right to the carriage of his traffic at the commodity rate to North Bay, and at the tariff rate from North Bay to Sturgeon Falls, although he consigns his shipment direct to Sturgeon Falls without mentioning the intermediate point.

It may happen that ignorant shippers will not be given this privilege, while those better informed will obtain it; but the uninformed shipper should not, on that ground be refused the lower rate.

Re Somerset Bridge, Ottawa.

The city of Ottawa applied to the Board for an order under sections 186 and 187 of the Railway Act, 1903, directing the Ottawa Electric Railway Company, the Grand Trunk Railway Company of Canada, and the Canadian Pcific Railway Company to submit a plan and profile for the purpose of widening the bridges and approaches thereto constructed by them at Somerset street, a public highway in the city of Ottawa.

The bridge in question spans the tracks of the Canada Atlantic Railway and the Canadian Pacific Railway at the western boundary of the city. The eastern approach and bridge proper lie within the city of Ottawa, the western approach within the village of Hintonburg. The Ottawa Electric Company, which is subject to the legislative authority of the parliament of Canada, owns and operates a street railway system in the city of Ottawa and its suburbs. The portion within the city was constructed and is operated under an agreement between the city and the company authorizing the company to exercise its franchise for the period of thirty years from August 13, 1893. By a later agreement between the electric company and the city, the city consented to the construction, maintenance and operation by the electric company of its railway upon and along Cedar street and other streets in the city, and by this agreement it was provided that nothing contained therein, or in the original agreement between the city and the company, or in the by-law of the City Council ratifying these agreements, should be 'construed to impose any liability on the corporation for the construction, repair, or maintenance of bridges on Cedar street, crossing Canada Atlantic Railway lines and the Canadian Pacific Railway lines, or any bridge or bridges that may be constructed in place of the same; or should be 'construed as an assuming by the corporation of the said bridge or either of them.'

The street referred to as Cedar street is the one now known as Somerset street, on which the bridge in question is situated.

By agreement between the Electric Railway Company, the Canadian Pacific Railway Company, and the Canada Atlantic Railway Company, for certain considerations therein named, the Electric Company agreed from time to time and at all times thereafter, to 'indemnify and save harmless the railway company from and against all liability to maintain, alter, repair, or reconstruct the said bridge or the approaches thereto, and also from and against all claims for damages of every kind or nature whatsoever, or for any penalty imposed upon the said bridge or crossing, or the approaches thereto'; and further agreed that, if it should at any time become necessary to reconstruct the then existing bridge or to alter the same, plans of the said alteration or of the new bridge to be constructed should first be submitted to and approved by the railway company.

The substantial question for consideration was as to the body which should bear the cost of the alteration. The city, through its counsel, offered to bear one-fourth of the expense. The railway companies contended that, in view of their agreement with the Electric Company, and of the fact that the necessity for the widening of the bridge arises wholly from its use by the Electric Company, that company should bear the remaining portion of the expense.

Judgment, Chief Commission Killam, March 13, 1907.

Held, that, as between the Electric Company and the two railway companies, the contention of the railway companies was correct, and that, as between the Electric Company and the city, the Electric Company should widen the bridge by sixteen feet according to the plans to be approved by the Board, and that the city should pay the Electric Company one-fourth the expense involved in the addition.

Passenger Rates.

By order of the Board, dated March 18, 1907, the Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company were directed to reduce the passenger rates for their lines east of and including the Calgary and Edmonton Railway, to three cents per mile.

Re The E. B. Eddy Company's Complaint.

This company has asked the Board to give the Grand Trunk Railway permission to reduce its charges on certain traffic carried at the rate of 10 cents per 100 lbs. under the tariff in force at the time, to 8 cents per 100 lbs. subsequently substituted.

Section 327 of the Railway Act provides that, when a railway company's standard freight tariff has been approved and published, the tolls specified therein—except where other tolls are provided for by special or competitive tariffs are the only tolls which the company is authorized to charge for the carriage of goods. Section 401 imposes a penalty on any person or company, or any officer or agent of a company offering, granting, giving, soliciting, accepting or receiving any rebate, concession or discrimination in respect of the transportation of any traffic by the company, whereby any such traffic shall, by any device whatsoever, be transported at a less rate than that named in the tariffs then in force; and section 402 makes it an offence in a company to depart from the tolls in a tariff then lawfully in force.

Judgment, March 18, 1907.

Held, that the Act gave the Board no power to permit a departure from the lawfully existing tariffs in respect of past transactions, or to legalize rebates from the previously earned tolls specified in such tariff; and on this ground, the Board should not attempt to interfere. 'In the present instance an attempt to exceed the Board's

power seems to be particularly objectionable, because the Board would not be able to secure to others in a similar position the rebates which the Eddy Company desires, but by becoming a party to the rebate, it would facilitate an undue preference in favour of one shipper.'

Judgment in dissent, Mr. Commissioner Mills.

On October 16 and 17, the E. B. Eddy Company thought of shipping pulp for the manufacture of paper from Danville, Que., to Ottawa, Ont., and called the attention of Mr. Bremner, who represented the Grand Trunk in Ottawa, to the fact that the 10 cent rate quoted on pulp from Danville to Ottawa was prohibitive, and that they could not ship pulp from Danville to Ottawa at a higher rate than 8 cents per 100 lbs.

After considering the question, Mr. Bremner, on behalf of the Grand Trunk, advised the E. B. Eddy Company that the Grand Trunk would give the said company a rate of 8 cents per 100 lbs. from Danville to Ottawa. The Eddy Company accepted the 8-cent rate and notified Mr. Bremner that some cars were then being loaded; and Mr. Bremner says that the Eddy Company was then notified that the 8-cent rate would not apply on cars shipped prior to the date on which the tariff became effective. The correctness of this latter statement, the Eddy Company does not admit, but alleges that in good faith, without any doubt that the 8-cent rate would apply, it shipped five cars of pulp between the time that the 8-cent rate was announced and the publication of the tariff to that effect.

Subsequently the Grand Trunk Company rendered a bill for $153.68, being an extra charge of two cents per 100 lbs. on six cars pulp shipped between the time of the announcement of the 8-cent rate and the publication of the tariff, 9 days later.

In reference to this account, the E. B. Eddy Company sets forth the following declarations and statements of opinion:—

It declares that it shipped five of the six cars in good faith after the reduction was announced, and had no doubt that the rate was to be 8 cents per 100 lbs.

It expresses the opinion that nine days was altogether too long a time to take in issuing the tariff, and directs attention to the statement of the chief traffic officer that the said tariff could have been issued much sooner, if it had been done in the way which is usual when it is known that cars are loaded or being loaded and waiting for shipment.

It calls attention to the fact that the application of the 8-cent rate from the date of the announcement would not involve a discrimination against any one.

And it further alleges that the Grand Trunk is willing to withdraw or cancel this account for extra charges over and above the 8-cent rate, if the Railway Commission will allow it to do so.

I think the intention of parliament, as expressed in section 401 of the Railway Act, was to prevent all kinds of *discrimination*—not to compel a railway company to continue charging an admittedly unreasonable or prohibitive rate until such time as it can conveniently prepare and issue a new tariff, when the said company is willing to make a reduction in such unreasonable or prohibitive rate as soon as its attention is called to the matter (before a change in the tariff is made)—provided such reduction is made with the knowledge of the Railway Commission and manifestly *without discrimination* against any one.

Such a reduction, under such circumstances and conditions, the Grand Trunk Railway Company announced its willingness to make in the published tariff rate on pulp from Danville, Que., to Ottawa, Ont.; and under such circumstances, I think the Board should allow the said railway company, without injury or discrimination against any one, to apply its 8-cent reduced rate from the time when it announced its intention to make the reduction from 10 to 8 cents per 100 lbs.

March 8, 1907.

SESSIONAL PAPER No. 20c

Re Application of the Toronto, Hamilton and Buffalo Railway Company, under section 175 of the Railway Act, 1903, for leave to construct a branch from its main line in the City of Hamilton to the works of the Canadian Westinghouse Company.

The projected line would cross Sherman avenue south of Princess street and run thence, approximately, parallel to and about 125 feet south of that street, and parallel to, and some 350 feet south of, the line of the Grand Trunk Railway Company crossing at grade, between certain points, the line of the Hamilton Radial Electric Railway Company and curving northerly, about Fullerton avenue, a short distance from the Westinghouse Company's works.

Objection was made to this line by the residents of the locality west of Sherman avenue and between the proposed line and that of the Grand Trunk Railway Company, on the ground that it would be very injurious to them that their properties should be inclosed within a strip bounded by two lines of railway; and the Radial Company objected to a crossing of its line at grade. The Grand Trunk Railway Company also objected to the use of any portion of its right of way for the proposed branch.

Judgment, Chief Commissioner Killam, March 28, 1907.

I am of opinion that it would not be reasonable to compel the Grand Trunk Railway Company to allow such a use of its land at that point.

I am also of opinion that it would not be proper to allow the construction of the branch beyond Sherman avenue south of Princess street. This would leave a strip of property about fifteen hundred feet long by three hundred and fifty feet in width between two lines of railway. At the present time the property between Sherman avenue and the Westinghouse Company's property is wholly residential, and even though the proposed branch were simply to be used as a spur line for access to the Westinghouse Company's works, it would be highly injurious to the residents of such a strip. It may be that circumstances will lead to the strip becoming eventually a manufacturing locality; but, unless it is sufficiently important, the residents should not be forced to this result.

On behalf of the city of Hamilton, objection is made to the proposed lowering of the Radial railway, as this would involve the lowering of Princess street below a large existing sewer, and in such a manner as would injure Princess street for public travel.

While one or more industries are to be served east of Sherman avenue, the extension beyond that is for the purpose of giving access to the Westinghouse Company's works only. If that company did not object, it would be possible to carry the line along that of the Grand Trunk Railway directly into the Westinghouse Company's premises. Doubtless it will be of great value to that company to have the additional railway connection and service, but it has already connection with the line of the Grand Trunk Railway, by means of which traffic can be transferred to and from the line of the Toronto, Hamilton and Buffalo Railway.

No public interests are involved, and it does not appear to me that the residents of the locality should be compelled to submit to the injury that would be done their property or that the Radial Company should have its line crossed at grade in order to enable the Westinghouse Company, which desires the railway communication, to procure it without injury to its own buildings or premises.

Held, Commissioner Mills dissenting, that the application for leave to construct the spur line on the route proposed should be refused, but that authority should be granted, if the applicant company desired, to construct a branch line with the diversion northwesterly over Sherman avenue to the south of the Grand Trunk Railway Company's right of way, and thence parallel thereto over the radial railway to Rosedale avenue, and to take it directly to the Westinghouse Company's premises, or have it connected with the Grand Trunk Railway tracks, as might be arranged, or that leave should be given for the construction of any portion of the line which might be desired.

9-10 EDWARD VII., A. 1910

Re Cedar Dale-Oshawa Crossing.

This was an application by the police village of Cedar Dale for an order directing the Grand Trunk Railway Company of Canada to provide better protection where its railway crosses Simcoe street, in the said village.

There was at the same point an electric railway crossing the Grand Trunk Railway, with interlocking appliances operated by the electric company, and the Board, by its order of December 19, 1906, directed that the gates be interlocked with those appliances and be operated by the signalman stationed in the tower, and that the Grand Trunk Railway Company should bear the expense incident thereto over and above the expense to which the electric company was subject. The Board also directed that an electric light should be provided and maintained by the village at the crossing.

Simcoe street, over which the Grand Trunk Railway crosses is a continuation of a street of the town of Oshawa but the point of crossing is outside the limits of the town. Counsel for the town supported the application for the order and took part in the examination of witnesses. Among other things he said: 'This corporation is interested in having the lives of the citizens protected—their lives and property—and would urge upon the commissioners as strongly as possible the propriety of providing such protection as may be thought proper.' And after reference to the probable expense of a subway he said: 'But all the other protection that could be afforded would be urged by this corporation.' Further he said: 'The town council do not see that they should be called upon to contribute. They contribute an immense amount of business to the railway.'

In announcing to the parties its conclusions the Board expressed doubt whether the town could be considered interested so as to be liable to be made a contributory to the cost of protection of the crossing and intimated that, if the railway company should be of opinion that the town was so liable, the Board would like to be furnished with references to any statutory provisions imposing on the town or bestowing on it any rights with respect to a highway outside the boundaries of the town; and it also stated that it considered that the village of Cedar Dale was not in such financial position that it should be asked to contribute, except by providing and maintaining a light at the crossing.

The Grand Trunk Railway Company then applied to have the order varied so as to apportion the cost of the installation, operation and maintenance of the gates equally among the town of Oshawa, the village of Cedar Dale and the railway company, claiming that the town was interested in the matter and should be compelled to contribute, and that the weak financial position of the village was no sufficient gound for exempting it.

This latter application was heard before the Board. In support of the claim of interest on the part of the town, reference was made to the position taken by the counsel for the town at the previous hearing, and to the case of the Grand Trunk Railway Company v. City of Kingston, 8 Ex. C. R. In that case an application was made to have certain orders of the Railway Company of the Privy Council made rules of the Exchequer Court. By these orders, the city of Kingston was directed to contribute to the expense incident to the construction of a subway for carrying a highway under the Grand Trunk Railway outside of the city limits; and objection was made to the authority of the Railway Committee to impose this condition. The learned judge of the Exchequer Court was of opinion that he had no authority to review the decision of the Railway Committee upon the merits or its methods of procedure. He said: 'Was the city of Kingston interested in the works that were directed to be done?' If that question is answered in the affirmative, the Railway Committee had jurisdiction to make the orders as amended. If it is answered in the negative, then the committee had no jurisdiction to impose upon the city of Kingston the obligation to bear any part of the cost of such works. I think the question should

be answered in the affirmative. Although the works directed to be carried out are not within the limits of the city of Kingston, they are in close proximity thereto, and are intended to protect the public from danger of crossing the Grand Trunk Railway by a level crossing on a road that, within a short distance from the crossing, connects with one of the city streets. In addition to this it appears that the city of Kingston was one of the movers in the application to the railway Committee for an order to have the works in question undertaken; and it seems to me that one could not now with fairness say that the city of Kingston was not interested therein.'

In *re* Canadian Pacific Railway Company and county and township of York, 27 O.R. 559; 25 O.A.R. 65, Mr. Justice Rose upheld the validity of an order of the Railway Committee under which the city of Toronto, the county of York and the township of York were directed to contribute to the cost of installing and maintaining gates and a watchman for the protection of a highway crossing which was in the township of York and outside the limits of the city of Toronto. The order of the Railway Committee had been made upon the application of the city of Toronto. The county and township of York appealed from the judgment. Burton, C.J.O., and Maclennan, J., were of opinion that the order was invalid in so far as it imposed a burden upon the township and county. Osler, J., held that the township and county were 'persons interested' within the meaning of the Railway Act, and subject to the jurisdiction of the committee. Meredith, J., held that, as the road was not a county road, and the county was under no responsibility for its maintenance, it could not be considered to be interested so as to be liable to the order of the committee.

The city of Toronto did not appeal, and it does not appear to have been represented before the Court of Appeal. As the original applicant for the order, it could hardly be said that it was not interested.

Chief Commissioner Killam:

In the two cases referred to, the courts were called upon to enforce orders made by the Railway Committee. They could not review the decisions of the committee upon the facts. If there was before the committee any evidence that the parties ordered to contribute were 'interested' within the meaning of the statute, the jurisdiction of the committee to make the orders could not be disputed.

In the present case this Board is the court of original jurisdiction which has to decide for itself, not merely the question of law, but also the question of fact, as regards interest, and further, whether, in the exercise of its discretion, it considers that the town should justly and properly be made to contribute to the cost of protecting the crossing in question.

I think that it cannot properly be said that, as a matter of law, there is not some evidence of interest on the part of the town which would support an order of the Board against it, particularly in view of the direct claim of interest on the part of counsel representing the town. But it does not appear to me that the town is necessarily bound by the admission of some interest, having in view the circumstances and the nature of the interest admitted. The town corporation is a statutory body. It has no duty to maintain highways outside of the town limits, or to preserve them from obstruction. It is not authorized to expend the moneys of the town upon such highways. As a public body, having in view the interests of the citizens, a town council often interests itself in many matters of public importance not directly coming within its functions. Naturally the safety of citizens of the town travelling along the highway and over the crossing in question is looked upon by the council as of public interest; but it does not appear to me that, on that account, the municipal corporation can be said to have any legal interest in the matter of protecting the crossing. The individual interests of citizens having occasion to use the highway are not, in my opinion, ascribable to the corporation, and the admission of the counsel for the town, and the part which he took in supporting the application, do not appear to me to

carry the matter farther or to constitute such an admission or evidence of interest as to warrant the Board in finding as a matter of fact that there was such interest.

I think, therefore, that the town should not be ordered to contribute to the expense of erecting, maintaining, or operating the gates.

As regards the village of Cedar Dale, the matter stands in no different position from that presented at the original hearing. I do not think that the Board should be called upon in such a case to revise its previous decision, where no new facts have been presented and no material point was previously overlooked. In making the order the Board expressed its doubt upon the question of making the town a contributory. That question was fairly open for consideration.

In my opinion the application should be dismissed, and the railway company should be ordered to pay to the village a reasonable sum for costs of the application to vary the order. In view, however, of the state of the previous decisions and of the position taken upon the hearing by the town, I do not think that the railway company should be made to bear any portion of the costs of the town.

Order dated May 23, 1907, issued accordingly. Costs of the application fixed at the sum of $25.

Re St. John Ice Company Complaint.

This was a complaint by the St. John Ice Company alleging that the New Brunswick Southern Railway Company was acting illegally and in violation of the provisions of the Railway Act by

1. Billing cars at 20,000 lbs. which contained 40,000 to 50,000 lbs. actual weight.

2. Billing cars at 2 cents per 100 lbs. contrary to C.R.C. No. 1, their standard tariff, which names 2½ cents per 100 lbs.

3. Billing cars at 20,000 lbs. contrary to the Canadian freight classification, which specifies 30,000 lbs. as minimum carload weight.

4. That through W. E. Scully, their agent at West St. John, passing and billing as 20,000 lbs. cars which W. E. Scully as 'The Union Ice Company' had sold and delivered as 50,000 lbs.

5. Misrepresenting the existing tariff charges in the following way: In December last past their general freight agent, Mr. P. W. Wetmore, quoted as their current rate on ice from Spruce Lake to West St. John 2 cents per 100 lbs., mimimum carload weight 30,000 lbs., when he must have known that tariff C.R.C. No. 2, giving a rate of 2 cents per 100 lbs. had been cancelled and that 2½ cents per 100 lbs. was the legal rate, as per C. R. C. No. 1.

6. Through the collusive action of its officials violating the established tariffs, inasmuch as P. W. Wetmore, the accountant, who was also general freight agent, passed entries and way-bills, certified by him and F. J. McPeake, the superintendent, to the auditor, showing carload weights 20,000 lbs. when actually they were from 40,000 to 50,000 lbs., showing a total freight per car of $4 had been collected when it should have been from $10 to $12.50 per car.

And applied, under section 60 of the Act, for an order for inquiry into the management of the said railway company, and for investigation of the complaints hereinbefore recited against the company and its officials.

Hearing at St. John.

Ordered, that leave be granted the complainant company to institute proceedings, under sections 399, 401 or 402, of the Railway Act, against the company for suffering or permitting.

(*a*) W. E. Scully to obtain transportation for goods at less than the required toll then authorized and in force on the railway of the company.

(*b*) For transporting goods for the said W. E. Scully; and for suffering and permitting W. E. Scully to obtain transportation for such goods at less than the regular

tolls then authorized and in force on the railway in violation of the provisions of the Railway Act.

Later, application was made, on behalf of the complainants, for a certified copy of this order, in order that the same might be made a rule of the Supreme Court under section 46 of the Railway Act.

Section 46 provides that any decision or order made by the Board may be made a rule, order or decree of the Exchequer Court, or of any Superior Court, in any province of Canada.

Subsection 2 of that section reads:—

'2. To make such decision or order a rule, order or decree of any such court, the usual practice and procedure of the court in such matters may be followed; or in lieu thereof, the secretary may make a certified copy of such decision or order, upon which shall be made the following endorsement signed by the Chief Commissioner and sealed with the official seal of the Board;

'To move to make the within a rule (order or decree, as the case may be) of the Exchequer Court of Canada (or as the case may be).'

Application refused.

Held, Chief Commission Killam, that, in the first instance, the usual practice and procedure of the court in such matters should be followed; that the other alternative provided under this section is intended rather for a case where the Board is itself seeking to enforce one of its own orders, that is to say, an order where the Board has taken the initative.

Vancouver Eastbound v. Winnipeg Westbound Rates.

The boards of trade of British Columbia Pacific coast cities complained to the Board that the rates levied by the Canadian Pacific Railway Company on all classes of goods, from Vancouver to points located in British Columbia and the Northwest Territories, as far east as Calgary, on the main line, and Macleod, on the Crowsnest line, were discriminatory as against them as compared with the rates on westbound traffic from Winnipeg to the same territory.

The complaint was not based on the ground that the rates were, in themselves, so excessive as to be unreasonable or unjust, but merely on the ground that undue preference was given to traffic from Winnipeg westward, as compared with that from the coast cities eastward.

Most of the traffic carried westward from Winnipeg is carried under what are known as 'traders' tariffs,' marked as, 'to be used on reshipment by Winnipeg wholesale houses only to traders doing business at or tributary to stations specified' in the tariffs. A question was raised as to the extent to which those tariffs were used, and the railway company contended that comparison could not be made with them, as the rates were only the balances of through rates from points east of Winnipeg to the western points in question, after deducting the regular tariff rates to Winnipeg.

Hearings at Ottawa, March 6, 7 and 8, 1906.

Judgment of Chief Commissioner Killam, May 25, 1907, concurred in by Deputy Chief Commissioner Bernier.

'It appears to me,' referring to the contention of the railway company mentioned above, 'that these questions are quite immaterial. If, by so basing the rates, an unjust preference is given to Winnipeg as against the Pacific points, it is equally as objectionable as if the rates were computed on any other basis, and the comparison should be made with traffic carried for similar parties and under similar conditions, and on other traffic the tariffs applicable thereto are those between which comparison should be made.

The complainants rely mainly on a comparison of the respective distances from Winnipeg and Vancouver, claiming that the levying of higher rates for shorter dis-

tances raises a presumption of unjust discrimination. They rely also upon a comparison of the practice upon lines in the United States, claiming that the westbound rates from St. Paul are equalized with the eastbound rates from Seattle and Portland at points much farther east than are the rates from Winnipeg with those from Vancouver on the Canadian Pacific Railway.

It appears to me that no inference can be drawn from a mere comparison of distances upon different portions of railways, and that it does not constitute discrimination—much less unjust discrimination—for a railway company to charge higher rates for shorter distances over a line having small business or expensive in construction maintenance or operation, than over a line having large business or comparatively inexpensive in construction, maintenance and operation.

In my opinion, a party raising such a complaint upon a mere comparison of distances should show the nature of the particular lines referred to and that there is a material disproportion of rates as against the shorter line after due allowance is made for the circumstances just mentioned.

At the hearing, the complainants offered no evidence upon these points; but the railway company gave some evidence showing that the cost of maintenance and operation were much greater, and the traffic lighter, upon the western portion of the line, than upon the portion from Winnipeg westward. While this showed that some difference in rates as compared with distances was reasonable, the information given was not sufficient to form an accurate judgment as to whether, after making due allowance for difference of traffic and expense, the western rates were unduly high as compared with the others.

As the matter was of considerable public importance, the Board did not feel warranted in dismissing the complaint on the mere ground that no sufficient proof of discrimination had been given, but directed its chief traffic officer to make further inquiries and afford it all the information possible for the purpose of enabling it to arrive at a correct conclusion. This inquiry has been made, with the result that the figures given by the railway officials have been found to have been, in the main, correct, and that some further information has been procured.

Members of the Board are aware, from personal investigation of the route, that grades are much heavier and the line much more difficult of operation in British Columbia than in the prairie provinces, and this view has been clearly established by the evidence.

The original report of the chief traffic officer showed that, by computations based upon the evidence as to the cost of operation and maintenance upon different sections of the main line of the railway, the rates from Vancouver to Calgary were really lower, as compared with those from Winnipeg to Calgary, than if they were based upon the proportionate expense. No accurate data were furnished by the evidence, or by the subsequent reports of the chief traffic officer, for comparison of the expense of operation and maintenance on what is known as the Crowsnest route, with that for the prairie lines, though the chief traffic officer reported that the Crowsnest line was much the more expensive to operate. He, however, made some further calculations based on a comparison of grades and the assignment, as a result thereof, to portions of the lines in British Columbia of a constructive mileage at the rate of one and a half miles from Yale to Revelstoke, and two miles from Revelstoke to Canmore, for each actual mile of railway. This estimate was taken from a statement in a letter of Mr. MacInnes, freight traffic manager of the Canadian Pacific Railway Company, that a certain tariff of the company was based upon such constructive mileage. This calculation showed that, using the constructive mileage thus estimated, the rates from Winnipeg westward were less per mile than those from Vancouver eastward. It appears to me that the results of such estimates afford no reliable basis for concluding that the Vancouver eastbound rates are discriminatory as compared with the Winnipeg westbound rates. The estimates are very loose, and are not based upon any

definite calculations. Those based upon actual figures as to comparative expense of operation and maintenance are much more reliable, even though, in some respects, details are not fully given. Although the company may in the past, for some purposes, have made use of such estimates, this should not be taken as establishing that the estimates were sufficiently accurate for the purposes of the complaint now in question. It is clear that an absolutely accurate comparison cannot be made, and the evidence does not appear to me sufficiently strong to warrant the conclusion that the eastbound rates are unduly high as compared with the westbound ones.

The report of the traffic officer further shows that the rates from Vancouver eastward are lower than those in the United States lines, and this although the portions of the United States served by these lines are much more productive and thickly settled, and afford greater local traffic than British Columbia; and, also, that the points at which the eastbound and westbound rates meet in the United States are considerably nearer Seattle than is claimed by the complainants; and that, comparing the proportionate distances from Winnipeg and Vancouver respectively with those from St. Paul and Seattle respectively, the average points of meeting of the rates on the Canadian Pacific Railway are as fairly situated as the points on the lines in the United States.

So far as the traffic over the Crowsnest line is concerned, it would be much more satisfactory if more definite information as to the cost of operation had been procured; but, taking into consideration the respective rates over that line and over the main line via Calgary to Macleod, and the results of the other inquiries, it does not seem to me sufficiently probable that further inquiry would establish the unfairness of the rates to warrant us in making such inquiry. It must also be remembered that the traffic on the prairie sections of the Canadian Pacific Railway is very much greater than that upon the lines in British Columbia; that the earnings per mile of the company for the prairie lines are very much greater than in British Columbia, and that the company may reasonably be expected to carry the traffic on the prairie lines at lower rates than upon the other lines. At any rate, if it sees fit to do so to a reasonable extent, it cannot well be claimed that this course involves unjust discrimination as against the traffic in and through British Columbia.

There are two minor points which require consideration. One arises under special commodity tariffs for westbound traffic from Winnipeg upon the classes of articles named in the statute 60-61 V., c. 5, s. 1 (*d*), intituled 'An Act to authorize a subsidy for a railway through the Crowsnest Pass.' That Act authorized the granting to the Canadian Pacific Railway Company of a subsidy towards the construction of a railway from Lethbridge, through the Crowsnest Pass, to Nelson, upon certain conditions, one of which was that an agreement should be made between the government and the company by which, among other things, a reduction was to be made in the general rates and tolls of the company upon the classes of merchandise therein mentioned westbound from and including Fort William and all points west of Fort William on the company's main line, or any line of railway throughout Canada owned or leased by or operated on account of the company.

As a result of this Act and the agreement made under it, the company made tariffs of reduced rates upon the classes of merchandise referred to, not only from Fort William and points east thereof westward, but also from Winnipeg westward, without similarly reducing rates on the same classes of merchandise from Pacific points eastward. These reductions cannot be considered as having been forced upon the company, but were the result of an agreement which it chose to enter into for the purpose of obtaining a subsidy in aid of the construction of a line of railway. The agreement and the statute did not even deal with rates from Winnipeg at all. When the statute was passed, and when the agreement was made, the law prohibited unjust discrimination between localities; and while parliament did not stipulate for

similar reductions over western portions of the company's railway, it should not, in my opinion, be considered as having authorized what would, if done otherwise, have produced unjust discrimination. I think that we are justified in inferring that, in respect of the classes of merchandise to which these tariffs relate, the reductions did result in such discrimination, and that the rates from Vancouver eastward, upon similar traffic carried under similar circumstances, should be proportionately reduced.

The remaining point arises out of the facts that, in order to meet water competition on the Pacific coast, the railway company carries goods from eastern points to the Pacific coast at lower rates than to interior western points, and that the same practice prevails with reference to the rates from Winnipeg westward; and that, at many interior points, the rates from Winnipeg are less than the combined rates from Winnipeg to points of the coast, and from the latter points to the interior ones. The low rates to the coast are made necessary in order to enable the railway companies to obtain traffic in competition with ocean carriers. Such a practice is distinctly authorized by the Railway Act, and, unless the higher rates from eastern points to interior western points are, in themselves, unjust or unreasonable, this practice does not involve unjust discrimination. Necessarily the situation must have a modifying effect upon the rates to the interior points, which must vary with the distances from the Pacific ports. Prima facie the railway company should be entitled to charge reasonable rates from the Pacific ports eastward, and it should not be obliged to charge and would not even be warranted in charging, excessive rates to the interior points for the purpose of equalizing the position of the Pacific coast points. It does not appear to me that the mere fact that the westbound rates from Winnipeg or any other point to such interior western point are less than the rates which would be made up by a combination of the rates from such eastern points to Pacific points, and from the latter to the interior point, in itself constitutes unjust discrimination or undue preference. The railway company is allowed to meet competition at coast points, and I think it should equally be allowed to meet the effect of that competition upon interior points to a reasonable extent.

I am of opinion that the complaint should be dismissed, except in so far as relates to the class of traffic for which reduced rates were given under the Act relating to the Crowsnest line.'

Judgment in dessent, Mr. Commissioner Mills.

'I regret my inability to concur in the judgment of the Chief Commissioner in this case.

'I do not attach so much importance as the Chief Commissioner seems to attach to certain portions of the evidence—evidence into which the element of interest enters largely and regarding the value of which there is clear ground for difference of opinion; and I differ wholly from the opinion expressed as to the bearing of what is called the "constructive mileage" evidence; it has, I would venture to say, a manifestly direct bearing, and is in my opinion the best possible evidence as to the relative cost of the operation and maintenance of the two sections of the railway, the mountain section and the prairie section—because it is an expression of the deliberate opinion of the railway company, with the facts in its possession, at a time when there was no dispute and no issue to be settled; according to which opinion, each mile of the road between Yale and Revelstoke cost as much to operate and maintain as one and one-half miles of the prairie section. The rates were adjusted on this basis and no complaint was made by any section of the country.

'At a later date, the rates on the prairie section were reduced, without any corresponding reduction on the British Columbia (including the mountain) section; the balance was thus disturbed, and has remained so, although no evidence was given at the hearing or since to prove that the traffic on the said British Columbia section had then become or now is *relatively* any less than it was when the "constructive mileage" basis was established; and for this reason, as I understand it, the chief

traffic officer of the Board used the "constructive mileage' of the company in one of his calculations.

'Further, the chief traffic officer, whose technical knowledge and experience specially fit him for dealing with such questions, investigated the points at issue, in all their bearings, at great length, and with the utmost care; he read and weighed the evidence pro and con; he considered the objections urged by the representatives of the railway company against the statements and recommendations made in his report of the 17th December, 1906, and he came to the conclusion that there has been and is discrimination against the Pacific coast cities as compared with Winnipeg.

'Therefore, without stating my reasons at greater length or further enumerating the portions of the Chief Commissioner's argument and conclusions from which I have to dissent, I would say that I approve of the recommendations of the chief traffic officer, as follows:—

(*a*) That the rates between Vancouver and Calgary should be reduced so as to preserve the same relative proportion between these and those between Winnipeg and Calgary as existed before the latter were reduced some years ago; in other words, that the prairie rates should apply between main line points in British Columbia, counting one mile between Yale and Revelstoke as equivalent to one and a half prairie miles, and one mile between Revelstoke and Canmore as equivalent to two prairie miles—equalizing the Vancouver eastbound and the Winnipeg westbound rates at a point 67 miles west of Calgary.

'(*b*) That the rates between Revelstoke and Macleod *via* Nelson should be similarly reduced, counting each mile between Yale and Crowsnest as one and a half prairie miles instead of two miles, as at present.

'(*c*) That from Vancouver to Calgary and Macleod and intermediate points commodity rates should be given on the same articles as have commodity rates from Winnipeg under the so-called "Crowsnest Pass agreement;" these rates to be calculated in the same manner as the class rates, as in sections (*a*) and (*b*) equalizing the Crowsnest reduced rates from Vancouver westbound and the rates from Winnipeg westbound at Wardner, 146 miles west of Macleod.'

Application Canadian Pacific Railway Company for permission to make refund to Messrs. George Moore & Co., of Waterloo, from the local freight charges to Galt, on eggs subsequently reshipped.

The eggs in question were shipped to Galt from the Canadian Pacific Railway Company's station at Eden, Straffordville and Tilsonburg, in less than carload lots, aggregating 51,820 pounds, on which the company's local rates to Galt were paid There was in effect at the time a special tariff which provided that eggs shipped from the company's own stations in lots of not less than 500 pounds, to certain specified cold storage points, would, on reshipment, be entitled to an allowance of one-third from the inward charges to the cold storage point. In the specified cold storage points of the Canadian Pacific Railway Company's original tariff, Galt and Waterloo, Ont., were not included, but were omitted, as the representative of the company says, by mistake, and as a result Messrs. Moore & Co. did not derive the benefits of the stop-over arrangements that were granted the points shown in the tariff, the effect of which was, as alleged, to unjustly discriminate against Moore & Co.

Judgment, Chief Commissioner Killam, November 13, 1907, concurred in by the Deputy Chief Commissioner Bernier, was to the effect that the rates paid were those provided for by the existing tariff, and that the fact that the tariffs for other points were discriminatory as against Galt and Waterloo, would not have been proper ground for disallowing some of the tariffs, or requiring a change, if an application had been made therefore, and it did not give the Board jurisdiction to direct or authorize the rebate for which authority is asked, or to interfere in the matter.

Judgment in dissent, Mr. Commissioner Mills.

'I regret my inability to concur in the decision arrived at in this case. It seems to me to grow out of such a strict and an inflexible interpretation of one section of the Railway Act as results in defeating or nullifying other sections of the said Act—construing section 328 so as to defeat the manifest intention of the equality sections, 315-320 inclusive, which were inserted in the Act to prevent unfair or unjust discrimination.

'The case is one admittedly of unjust discrimination, amounting to $40.61 against George Moore & Co., of Waterloo, Ont., due to mistake in the tariff. The company admits the mistake and offers to refund the amount. Our chief traffic officer advises that the refund be made, provided two things are done to remove the possibility of discrimination against any other shipper of the same commodity; and the decision of the Commission is that the refund must not be made—that the rate in the published tariff, right or wrong, even though it has admittedly resulted in discrimination, must be charged, no matter who suffers loss, until a new tariff is printed and published. This may be according to the letter of the law; but it is, I think, at variance with the principles of justice; so I have to dissent.'

Held further (Chief Commissioner and Deputy Chief Commissioner), following previous rulings (see complaint Dominion Concrete Company, Ltd., and the E. B. Eddy Company's complaint):

'That the Board is not a court for all purposes, but only for the purpose set out in the Act. Discrimination is forbidden by the Act. The Board, under its general jurisdiction, has power to prohibit the continuance of discrimination when found to exist, and it has the power to disallow tariffs which, in that or other respects, are contrary to the provisions of the statute; but I cannot find anything in the Act which confers upon the Board jurisdiction to direct or authorize rebates on the ground set up in this application.'

Naylor and the Windsor, Essex and Lake Shore Rapid Railway Co.

This was the complaint by C. E. Naylor, of the town of Essex, alleging that the Windsor, Essex and Lake Shore Rapid Railway Company had constructed its line of railway and high tension wire along Talbot street, in the said town of Essex, in such a way that electrical current had escaped from the said wire to the wires of the complainant and thence to private premises, where it had caused damage; and applied for an order directing that steps be taken to remove the danger.

The Windsor, Essex and Lake Shore Rapid Railway Company was incorporated by Act of the legislature of the province of Ontario, passed in the year 1901, c. 92. By that Act the company was authorized to construct a railway, to be operated by electricity, from a point in or near the city of Windsor, through the towns of Essex and Leamington, to a point in or near Wheatley. The Act provided that the railway, or any part thereof, might be carried along and upon such public highways as might be authorized by the by-laws of the respective corporations having jurisdiction over the same.

By Act of the Parliament of Canada, 1906, c. 184, the railway works of the company were declared to be for the general advantage of Canada, and provided that the Railway Act, 1903, and amendments thereto should thereafter apply to the company and the said works to the exclusion of the Electric Railway Act of Ontario or any provision of the Company's Act of incorporation inconsistent therewith; but that nothing therein should affect any action theretofore taken pursuant to powers in such Acts contained.

The Dominion Act also provided that the company should not construct or operate its line of railway along any highway or other public place without first obtaining the consent (unless such consent had already been obtained), expressed by

by-law of the municipality having jurisdiction over such highway or other public place, and upon terms to be agreed on with such municipalities.

On the 7th of April, 1902, the municipal council of the town of Essex passed a by-law granting to the company, subject to the terms and conditions contained in the by-law, the right to construct its line through the town and along the highway known as Talbot street. The by-law provided that the poles and wires of the railway company should be placed so as not to interfere with the poles or wires of any other person or company then existing. The by-laws also provided that the franchises thereby granted should be subject to all other franchises, rights or privileges in respect of Talbot street, within the town, theretofore enjoyed by any person or persons, company or companies.

On the 19th February, 1900, an agreement in writing was made between the town of Essex and the complainant, under which the complainant agreed to furnish certain lamps for street lighting in the town, and to keep the same burning each night. At the time of the passing of the by-law, the complainant had upon and along Talbot street, a number of poles and wires used for the purpose of furnishing power for the lighting of the streets and the lighting of private premises. The railway company constructed a line of railway along Talbot street and put upon the street poles and wires for the purpose of conveying electrical power for the operation of the railway. In doing this, it interfered to some extent with the complainant's poles and wires, and so that there was risk of the escape of the current from their wires to those of complainant. The evidence showed that electrical current had escaped from the company's power wire to complainant's wires and thence to private premises, where it had caused damage.

Hearing at Chatham, October 29 and November 1, 1907.

Judgment, Chief Commissioner Killam, December 24, 1907

'..... If the railway and the power line were constructed before the passing of the Act declaring the company's railway works to be for the general advantage of Canada, it appears to me that no order of the Board was necessary to authorize their subsequent maintenance and use. If none of these things were done before the passing of the Act, I think that the railway company required the leave of the Board, under sections 235 and 237 of the Railway Act, for the purpose. If part only of the work was done before the Act and a part afterward, difficult questions might arise as to the necessity for such leave, under which the actual facts might be material; and I, therefore, refrain from expressing any opinion upon such questions.

For the present I assume that the work, or sufficient of it, was done before the passing of the Dominion Act to render the maintenance and operation of the railway upon and along the street lawful. If the company were coming for leave to construct and operate the railway upon the street, the Board would clearly, in my opinion, have the power to impose upon the company such conditions as it might see fit for the purpose of protecting existing telegraph, telephone or electric lighting lines, and for the purpose of protecting the public from the danger necessarily arising from the escape from the railway company's wires of heavy electrical currents to and over any other lines; and it appears to me equally clear that, if the railway and its power lines were lawfully upon the street when the Dominion Act was passed, the Board still has the power, under section 238 of the Railway Act, to impose similar conditions upon the railway company or to make orders requiring the railway company alone, or other parties interested or affected or the company and any such other party or parties jointly, to execute such works or take such measures as, under the circumstances, appear to the Board best adapted to remove or diminish the danger.

Both by the terms of the Railway Act and by those of the Act declaring its works to be for the general advantage of Canada, the company became a railway company subject to the terms of the provisions of the Railway Act so far as applicable. The poles and wires erected by the company formed a necessary and integral part of th

railway works. In exercising the jurisdiction conferred upon it by section 238, the Board must take into consideration the nature of the works and of the protective measures which works that nature render necessary, just as in the case of a railway operated by the power of steam.

The case is, therefore, one for the exercise of the Board's discretion as to the measures to be taken and the party or parties who are to do the work or bear the expense. The Board's electrical engineer has visited the locality and reported upon the measures which he deems necessary for the protection of the public and of the owners of other lines. The by-law of the town authorizing the construction of the railway upon and along the street required that the railway company's poles and wires should be so placed as not to interfere with any poles or wires of any other person or company existing at the time of the passing of the by-law. Whether a formal by-law of the town council was necessary to enable Naylor lawfully to place and maintain his lines upon the public street, we must presume that they were there with the knowledge and the tacit consent of the municipal authorities.

Under these circumstances, it appears to me that the railway company should adopt the measures and bear the expense necessary to the protection of the existing lines and of the public.

At the hearing Naylor's counsel expressed his client's willingness, if the railway company would construct the necessary lines for the purpose of enabling him to transmit power across the street where this was necessary for connections on the other side, and would allow the use of its poles on the opposite side of the street, to do the work and bear the expense of running his wires along these poles.

This appears to me to be a reasonable solution of the difficulty, and an order should, in my opinion, go accordingly; the order to be drawn under the advice of the electrical engineer and to direct the railway company to provide and place, in accordance with the recommendations of the electrical engineer, the wires necessary for this purpose, and to allow Naylor the use of its poles for carrying his wires—the same to be placed to the satisfaction of the Board's electrical engineer.

The railway company should pay Naylor the costs incurred by him in respect of the proceedings before the Board in this matter, and the order should so provide.

It does not appear to be necessary to enter into consideration of the objections to the by-law or to Naylor's authority for the use of the street, or to any of the other questions of law raised by counsel. I would put the case wholly as one for the exercise of the Board's discretion under the express terms of the Railway Act, and impose the expense upon the railway company in view of the terms of the by-law which was necessary to enable it to use the street.'

Order, dated January 15, 1908, issued accordingly.

Interswitching.

Several applications and complaints from different places were made to the Board respecting what are known as switching charges, and related—

(*a*) To the amount of the charges;

(*b*) To the practice of adding to the tariff rates of the company carrying to a particular place the switching charge of another company to which the traffic is transferred for carriage to and delivery at another point in or near the same place; and

(*c*) To the practice of railway companies, in cases where the traffic originates at a place common to the two companies, or what are usually designated as competitive points, while adding the charge when the point of origin is non-competitive.

Hearings at Winnipeg, Lindsay and Toronto.

Judgment, Chief Commissioner Killam, concurred in by the Deputy Chief Commissioner Bernier and Mr. Commissioner Mills, December 26, 1907.

'..... In some late cases before the Interstate Commerce Commission in the United States, Nos. 1073, 1074, Laing-Harris Coal and Grain Company v. Atchison, Topeka and Santa Fe Railway Company, 12 I.C.C. Rep. 556, the complainants claimed that the tariff rates of the railway company, which read to Kansas City, included delivery at any points within the corporate limits of Kansas City without regard to whether this was or was not upon the lines of that company. The Commission said in its report: "This claim and argument are entirely at variance with customs of many years' standing and contemplate imposing upon the carrier a duty which it would be utterly unable to perform. The Act to regulate commerce in specific terms provides that one carrier shall not be obliged to give the use of its tracks and terminals to another carrier engaged in like business. The defendant company could not deliver cars to any industry except upon its own rails without the consent and co-operation of the carrier or carriers upon whose rails the industry sought to be reached is located or via whose rails it is reached. A carrier may not reasonably be required to accept and deliver free of charge traffic which is moved by its competitor." And again: "In the absence of tariff specifications to the contrary, the transportation shown in a carrier's tariff to a given point are and always have been understood to include delivery to industries or unloading places located upon its own rails, and if consignee or owner of shipment orders it transported by another carrier to another place, he must expect to pay the lawful charge for that service."

'In those cases the shipments were originally billed simply to Kansas City, and after arrival, direction was given to transfer to destinations not on the line of the originating company. But, the same principles were applied in another set of cases, No. 1078, Leonard v. Chicago, Milwaukee and St. Paul Railway Company and other cases, 12 I.C.C. Rep. 573, where it appeared that at one time the originating company absorbed the switching charge, later discontinued the practice, and subsequently resumed it; and the complainants claimed that the adoption of the practice and subsequent resumption after discontinuance showed the unreasonableness of requiring shippers to pay the switching charge; but the Commission refused to disallow the charge. There the Commission said: "The practice at that time of absorbing switching charges without a specific tariff provision therefor was very general among the carriers." If offence against the law was involved in such practice it would rest in the absorption rather than in requiring shippers to pay, because the switching charge being the charge of another carrier, should appear in its tariff. No switching or other terminal charges should be absorbed except under a plain and specific tariff provision therefor.'

'There is not in our legislation any express provision similar to that in the United States Commerce Act, that one carrier shall not be obliged to give the use of its tracks and terminals to another carrier engaged in like business. But, in the absence of any such enactment, this must necessarily be the law. Express legislative authority is necessary to enable one railway company to use the lands or premises of another company without its consent. Such authority is embodied in section 176 of the Railway Act, provided the approval of this Board is first obtained; and the Board is empowered to fix the compensation to be paid therefor. In the London case, the Board held that the transfer by one railway company to another at a junction point of traffic to be delivered on the second company's line near the junction point did not constitute a use by the first company of the second company's tracks or terminals; but that the second company was to be compensated by a fair rate for the receipt, carriage and delivery of the particular traffic so transferred, including the use of its premises for the purpose. The rule was laid down that the 'division between railway companies of the joint rates for traffic thus interchanged should be made upon the principle of giving reasonable compensation for the service and facilities furnished by the respective companies in respect of the particular traffic thus

interchanged. The order of the Board required the interchange of traffic between the lines of the Canadian Pacific Railway Company and the Grand Trunk Railway Company at the junction point near London to and from the tracks and terminals of the Grand Trunk Railway Company in and near London, and provided that the rates to be charged for such traffic should be those provided for by any joint tariffs in existence between the railway companies interested, and, in the event of there being none, the rates charged by the Grand Trunk Railway Co. between the same points, and, in the absence of either, the rates charged by the Canadian Pacific Railway Company between the same points, and fixed the amounts to be charged by the Grand Trunk Railway Company. In that case the Canadian Pacific Railway Company consented, and offered to absorb the Grand Trunk Railway Company's charges. The order was affirmed on appeal to the Supreme Court of Canada.

I think the principles laid down by the Interstate Commerce Commission are correct—that a railway company's tariff to and from particular places should, in the absence of indication to the contrary, be read as covering only traffic originating at and for delivery upon its own tracks and connecting sidings within its own terminals, and not as including traffic originating or for delivery at or near the same places upon the lines of another carrier; that a reasonable additional rate should be payable for what is ordinarily designated switching, namely, the service for short carriage and receipt or delivery as the case may be; and that the company carrying for the long distance should not be obliged to absorb the whole of this charge. I think, however, that the Board may require the two companies to treat such traffic as joint traffic and to establish therefor joint tariffs under which the joint rate may be less than the sum of the two rates, and each or one of the companies required to accept less than its full rates. In such cases the principal carrier does not usually perform the full service which it performs in ordinary cases of receipt, carriage and delivery upon and over its own lines only. There may be cases in which as much services is performed, but usually the service is less.

The Board's chief traffic officer has made a report upon this subject which contains valuable suggestions and recommendations both as to fixing the bases of switching charges and as to divisions of the joint rates between the carriers, and also as to some other matters.

In the case recently heard by the Board at Toronto it appeared that it had long been the practice of the two companies operating there (the Grand Trunk Railway Company and the Canadian Pacific Railway Company) to absorb these charges in respect of traffic upon their respective lines to and from Toronto, received or delivered on the lines of the other, and that, without any change of tariffs, they had recently abandoned this practice and adopted the principle of adding the switching charges to the regular tariff rates. The origin of the practice was explained. It appeared that, when the Canadian Pacific Railway was constructed into Toronto, it had to receive and deliver its traffic wholly or mainly upon the tracks of the Grand Trunk Railway Company and was practically compelled to bear the charges therefor, that, as the Canadian Pacific Railway Company established and enlarged its terminals and acquired siding to industries and places of business, the Grand Trunk Railway Company followed the same practice in reference to traffic received and delivered on the tracks of the Canadian Pacific Railway Company. It does not appear to me that the railway companies are bound to make an exception in the case of Toronto or that, because of their having thus mutually absorbed these charges for a considerable length of time, they must necessarily continue to do so forever. The whole question is one of reasonableness; and while the continuance of the practice affords evidence of its reasonableness, it is not conclusive. I do not feel that we can properly require the companies to continue it. I think, too, that each company, without changing its tariffs, could add the charge of the connecting carrier. The switching tariffs should

certainly be filed with the Board, but, in the absence of filing, the rates set out in the standard tariffs would prevail; and it is not claimed that charges were made at higher rates. All claims made for refunds should, therefore, in my opinion, be disallowed. The exact amounts which should be paid and the exact divisions for the aggregates of the two sets of charges which are to be allowed hereafter, were not considered and discussed at Toronto. Our attention was confined to the main questions of principle. Naturally the scales suggested by the chief traffic officer cannot well be applied generally without consideration of local circumstances.

While, in my opinion, the railway companies by which the principal carriage is performed should not be obliged to bear the whole of these switching charges, it does not follow that they should be debarred from absorbing the whole of such charges provided that this does not involve unjust discrimination or preference. The Railway Act recognizes that what might otherwise constitute unjust discrimination or preference may be justified as the effect of competition. If a railway company receiving or delivering traffic upon its own lines is obliged to charge its full tariff rates without absorbing the switching charges of the line from which it receives or through which it delivers the traffic, it will often be deprived of the opportunity to get traffic from or to places common to it and other railway companies, and such places would often lose some of the competitive conditions. While this may result in some disadvantage to non-competitive points, the existence or possibility of such disadvantage cannot, I think, be considered as constituting the railway companies to absorb the whole of such charges in all cases, or prohibit them from absorbing them where this is induced by real competition.'

Brantford and Hamilton Power Wire Crossing over the Railway of the Grand Trunk Railway Company of Canada at Cainsville, in the Province of Ontario.

This was an application by the Brantford and Hamilton Electric Railway Company, under section 246 of the Railway Act, for leave to carry a wire for the transmission of electric power of high voltage across the Grand Trunk Railway Company's tracks at Cainsville. The applicant company had previously obtained leave to carry its railway under the track of the Grand Trunk at this point. The Grand Trunk Railway Company asked that the wire also be carried under its railway. The electrical engineer of the Board reported that this would not be safe, and that the crossing should be over the railway, and the telegraph and other wires along the railway.

The Board proposed to make a short temporary order, giving the right of crossing, specifying certain precautions, and leaving it subject to further order. A draft of such an order was submitted to the railway companies. It was approved by the applicant company, but objected to by the Grand Trunk Railway Company, which submitted a form of order embodying a number of conditions to which the applicant company objected. Among others, there was a provision for indemnifying the Grand Trunk Railway Company against damage.

Judgment, Chief Commissioner Killam, February 17, 1908:—

'The question of requiring the condition of indemnity was very carefully considered by the Board in some applications of the Kaministiquia Power Co., and it was there decided by the Board that, when the power wire is sought to be carried over the railway company's own property without other compensation to the railway company, it is reasonable to make the power company responsible for any injury resulting therefrom, except such as may be due to default or neglect on the part of the railway company's servants or agents; but that, where the wires are, under proper authority, being carried along a highway over which the railway company has merely a right of crossing, such responsibility should not be imposed upon the power company, which, in such case, should be left to its common law liability.

The order in that case was settled after contest between the power company and the railway company, and the form seems to be a reasonable one for ordinary use, and should, I think, be adapted to the present case.'

Order issued accordingly, March 24, 1908.

Re Private Siding.

The facts, as related to the Board, were that 'S,' a private individual, had a siding partially on his own land and partially on the land of an adjoining neighbour 'C,' connecting with the Canadian Northern Railway Company's line of railway. As the siding was not, at the time of the application to the Board, and had not been for some time previous, used by 'S,' 'C' applied to the company for permission to load a few cars of wood, thereby saving quite a haul and the necessity of crossing the company's track. The railway company refused its consent, and the Board was asked to direct the company to grant the same.

The Board caused inquiry to be made, and found that the siding referred to was a private one, put in under an agreement between the railway company and 'S'; that there was no record of any order either of the Board or of the Railway Committee of the Privy Council, authorizing the construction of the siding as a branch of the railway company.

Held, that the Board had no power to compel the railway company to use the spur for 'C's' accommodation; that if the siding had been placed upon 'C's' land without his authority it would be a matter in respect of which the Board had no jurisdiction, but rather a matter of civil right which must be dealt with in the ordinary courts, in case 'C' desired to assert a claim to the land as against the railway company or against 'S.'

January 30, 1908.

Re Highway Signboards.

Under the Railway Act, signboards at every railway crossed at rail level by any railway are required to be erected and maintained at each crossing, with the words 'railway crossing' painted on each side thereof in letters at least six inches in length.

The Board was asked if any arrangements had been made by it with respect to the placing of these signboards; whether or not a signboard could be placed in the middle of the highway leading to the crossing, or on the side of the road; and whether they could be so placed that there would be a danger to vehicles running into them.

Held, that in the absence of complaints that highway signboards are so placed as to obstruct highway traffic, it was not necessary for the Board to adopt any regulations in respect thereto; that, in the opinion of the Board, a railway company is not justified in placing highway signboards in such positions as to obstruct highway traffic; and that the Board would be glad to be informed of any cases in which such signboards are so placed.

April, 1907.

Re Complaint of Monypenny Brothers & Co.

Complainants alleged that they had occasion from time to time to make a claim against the Grand Trunk Railway Company for shortages in shipments made to them occurring through pilferage while in transit. The shipments referred to were consigned to complainants at Toronto by the manufacturers in the old country, and were shipped via the English railroads, the steamship line and the Grand Trunk Railway. The contention was that the Grand Trunk Railway Company was responsible to them, but that the company refused to admit liability, alleging that the goods were delivered as received from the steamship company.

Held, that the Board has no jurisdiction to compel railway companies to pay claims for lost or damaged goods; that the remedy given by the statute is by action in a court of competent jurisdiction; and that the Board did not consider that it could properly advise upon the question of the railway company's liability.

January, 1908.

Re Application of the Town of Almonte for Protection of Crossings by Canadian Pacific Railway over certain Streets in the said Town.

This was an application by the corporation of the town of Almonte for an order directing the Canadian Pacific Railway Company to provide suitable and proper protection at the railway crossings in the said town.

After hearing, the judgment of the Board—Chief Commissioner Killam and Deputy Chief Commissioner Bernier, Mr. Commissioner Mills dissenting—was that the railway company be required to place and maintain an electric bell at the Main street crossing and to construct a subway to carry Little Bridge street under the tracks of the railway company, according to plans to be submitted to and approved by the Board's engineer; and to erect and maintain gates at the Bridge street crossing, and keep a watchman or watchmen there at all hours by day and by night, the town to pay one-half the wages of such watchman or watchmen. The order also to provide that by consent of the council of the town, the gates might be closed at such hours of the night as the council prescribed. The order further to provide that if the town should consent by resolution within three months from the date of the order, the subway was to be placed at such point between Bridge and Little Bridge streets as the Board determined, and both the said streets diverted into and through the subway, and the level crossings at both streets closed. In every case the railway company to bear all compensation, except in respect of injury to the property of the town, which was to be borne by the town.

Judgment in dissent, Mr. Commissioner Mills.

At the rehearing of this application on March 26, 1907, it was stated by the mayor that the population of the town of Almonte is 1,200 less than it was about twenty years ago; and, assuming this statement to be correct, I cannot avoid the conclusion that the town has not contributed in any degree to the increase in danger at the railway crossings referred to in the application. This increase in the danger which has made protection at the said crossings now necessary, has, in my opinion, been caused to some extent by the raising of the railway tracks at Bridge street and Little Bridge street, but is chiefly, I might say almost wholly, due to the increase in through traffic on the railway, especially to through trains which run at a high rate of speed and pass Almonte without stopping. Therefore, I am unable to see the equity of requiring the town to pay anything towards the protection of crossings over streets which were in existence when the railway was constructed, and which have been made dangerous, not by increased population or increased traffic in the town, but by through traffic on the railway.

Hence, in view of the admitted facts, and the allegations of the mayor as to the decrease in the population of the town and the consequent decrease in vehicular and pedestrian traffic over the crossings referred to in the application, and his declaration as to the smallness of the total assessment of the town and the very high fixed rate of taxation, my judgment is that an order should go directing the railway company, at its own expense, to put in and maintain an electric bell at Main street, as per the report of Engineer Simmons; construct a subway on Little Bridge street, as per the report of Chief Engineer Mountain; and remove the building and shed which obstruct the view at Bridge street—the town agreeing to pay to the said company one-quarter of the actual cost of the subway on Little Bridge street.

April, 1907.

The Canadian Pacific Railway Company v. The Grand Trunk Railway Company (known as the London Interswitching Case, Reported in the First Annual Report of the Board, at p. 86.)

The Board granted leave to the Grand Trunk Railway Company to appeal from its order to the Supreme Court of Canada, and the following questions were submitted, with the approval of the Board:

1. Had the Board authority, under the Railway Act, 1903, and particularly under sections 53, 71 and 214, to make the order in question under the circumstances shown in the record in this case?

2. Are sections 266 and 267 of the Railway Act, 1903, applicable under the circumstances of this case where one and the same through rate is charged to and from all points within the district lying in and about the city of London to which the said order applies?

3. Does the order appealed from involve the obtaining by the Canadian Pacific Railway Company of the use of the tracks, station or station grounds of the Grand Trunk Railway Company at London, for which the Grand Trunk Railway Company should obtain compensation under the Railway Act, 1903, and particularly under section 137?

4. Was the Board 'bound, as a matter of law,' to take into consideration, in estimating the remuneration or compensation to be allowed to the Grand Trunk Railway Company in consequence of or for what was required of that company by the said order:—

(*a*) The magnitude of the business of the Grand Trunk Railway Company at London as compared with that of the Canadian Pacific Railway Company at that point.

(*b*) The comparative advantage which each of the said two companies can offer to the other there.

(*c*) A comparison of the loss which one company is likely to sustain with the gain likely to accrue to the other company from the giving of these facilities which the law required.

(*d*) The amount which may have been expended by the Grand Trunk Railway Company in the acquisition of their terminal facilities at London or the value of their investments therein, otherwise than as evidence of the fair value of the service to be rendered and of the use of the facilities to be afforded under the said order.

(*e*) The amount of any further investment of capital which the Grand Trunk Railway Company may be obliged to make in order to carry out the terms of the said order, otherwise than as excepted by the last preceding paragraph.

The order was affirmed.

The judgment of the court delivered by Davies, J.: Since this appeal was taken from the decision of the Railway Commissioners, parliament has enacted an amendment to the Railway Act, placing beyond doubt the power of the Commissioners to make such an order as the one now appealed from.

Our decision, therefore, as to what was the true meaning of the original Act is of no public importance, and we do not see any good purpose in stating reasons for the conclusion we have reached that the appeal must fail.

We should answer the first and second questions in the affirmative and all others in the negative.

Ruling re Application for Opinion in Matter not Pending before Board.

An ice company owned a switch from the line of railway of a railway company to their icehouse, which they kept entirely in repair and owned themselves.

The railway company delivered cars to their icehouse over this switch. The Board was asked on behalf of the owners of the industry who would be responsible for

accidents that might occur in the operation of the switch, and whether the railway company would have the privilege of operating the switch against the wishes of the ice company.

Held, Chief Commissioner Killam, that, while the Board is always willing to give information as to the contents of statutes to which parties may not have the means of convenient access, it considered that it should not undertake to give legal opinions as the parties' right under circumstances stated to it, except where it became necessary to do so in dealing with applications and complaints that came before it in due course for adjudication; that, in the case submitted, the rights and obligations of the parties might be affected by the circumstances not known to the Board, and the Board felt, therefore, that it could not properly undertake to advise in the matter.

Re Brantford and Hamilton Railway re Carriage of Troops on the Brantford and Hamilton Railway.

The Board was advised by residents in Hamilton that it was proposed to transport regiments of troops from Hamilton to Ancaster, stating that an inspection of the Brantford and Hamilton Railway would be necessary before that time, and asked the Board to cause an inspection to be made.

And chief engineer of the Board inspected this company's railway from Hamilton to Ancaster, a distance of six and one-half miles, and recommended that the request of the citizens to haul troops over it for the date asked be granted upon certain conditions.

Held, Chief Commissioner Killam, that there was no authority for the making of an order such as that recommended by the chief engineer. By section 261 of the Railway Act, no railway, or any portion thereof, is to be opened for the carriage of traffic other than for the purposes of the construction of the railway until leave therefor has been obtained from the Board, as thereinafter provided. Two systems of opening are provided for: (1) for freight traffic only; (2) for traffic generally, after a certain application and affidavit has been furnished and an engineer has reported that, in his opinion, the opening of the railway, or portion thereof, proposed to be open for the carriage of traffic, will be reasonably free from danger to the public using the same. The necessary application and affidavit have not been furnished and the engineer has not reported as required by the Act. Upon these grounds, the Board refused to authorize the limited use of the railway as asked for.

Ocean Bills of Lading.

A railway company submitted to the Board, for temporary approval, forms of bills of lading covering traffic between ports in Europe and Canada. Some of these were intended for ocean traffic only, others appeared to relate to traffic partly by ocean and partly by rail in or through Canada, and while the terms of the bills of lading appearing to be intended to cover the railway service as well as the ocean transportation, they were evidently drawn with special reference to the ocean transportation, and the effect of their application to the railway service was not clear.

Held, Chief Commissioner Killam, that in respect of the bills of lading intended for ocean traffic only, the Board had no jurisdiction; that, in regard to the others, which appeared to be drawn for traffic to be carried partly by ocean and partly by rail, while the terms of the bills of lading appeared to be intended to cover both the railway service and the ocean transportation, they were evidently drawn with reference mainly to the ocean carriage; and the application, in many parts, to the railway service difficult, and their probable effect far from clear; and that in other respects the terms of the bills appeared to the Board not to be reasonable or such as the Board should approve for transportation upon railways; that, by the terms of the

bills, it appeared to be intended that the carrier should be relieved from liability for many intentional wrongful acts and many acts of negligence of employees; that the provision requiring consignees to take delivery of goods within twenty-four hours after arrival, although they may have had no opportunity to learn of the arrival, did not appear to the Board to be reasonable, and that the provision giving a lien on goods not only for the freight and charges thereon, but also for all previously unsatisfied freight and charges due by consignees, appeared to be unreasonable and also to go beyond what is authorized by section 345 of the Railway Act; and that in these and other respects the forms of the bills appeared to the Board to be so objectionable that they should not be approved.

Re Application of the Vancouver, Westminster and Yukon Railway Company, under sections 221 and 224 of the Railway Act, for authority to construct Branches or Spurs in the City of Vancouver.

In this case the Board decided the principle that it could not authorize the construction of a branch line from a point on a line of railway not yet existing.

The question also arose, where the proposed branch line or spur involved the crossing of a navigable water, whether the Board could authorize such construction before the approval by the Governor in Council of the site and plans of the work as required under section 233 of the Railway Act. This section provides that when the company is desirous of constructing any work over a navigable water, a plan and description of the proposed site for such work and a general plan of the work to be constructed must have the approval of the Governor in Council; and upon such approval, application made to the Board for an order authorizing the construction of the work.

Held, here, that while there was no doubt that False creek and the arm in question, as navigable waters, required the approval by the Governor in Council of the site and plans of the work before it could be constructed, such approval was not a necessary condition precedent to the granting of the application by the Board.

Chief Commissioner Killam: 'The converse is, to my mind, the case; the authority to build a branch is a condition precedent to the application for approval of the site and plans of so much as crosses navigable water. In my opinion, the granting of authority by the Board to build a branch does not, of itself, relieve a railway company from liability to comply with the other provisions of the Railway Act, it does not, of itself, authorize the grading of the line across a highway or another railway without specific leave therefor from the Board, though it is convenient in many cases to determine upon the one application, or at the same time, whether the last mentioned leave should be given, as in many cases circumstances affecting applications for such leave might well have to be considered in determining whether the branch should be allowed, and the parties interested in the railway or highway crossings might well be heard upon the original application. In many cases, it may well appear that the objection to such modes of crossing highways or railways as are found practicable, are such that no authority should be given for the construction of the branch, and, in the present case, the Board is entitled to take into consideration the extent to which any of these lines would probably obstruct navigation, before determining the application.'

April 10, 1907.

Re Montreal Produce Merchants' Association's Complaint.

This was a complaint against the advance in the winter export rate on butter and cheese from Montreal to Portland and West St. John, as proposed by the Grand Trunk and the Canadian Pacific Railway Companies, alleging that for two or three

winters prior to the lodging of the complaint the rate on these commodities had been 16 cents per 100 lbs., and that it was now proposed to increase this rate to 20 cents per 100 lbs., or an advance of 25 per cent. The complainants asked for an order restoring the original rates.

At the hearing it was alleged on behalf of the complainants that the fact that the lower rate had been maintained for a number of years was evidence that such rate was a reasonable and profitable one, and that, therefore, the new rate was unreasonably high.

Judgment, Chief Commissioner Killam, concurred in by Deputy Chief Commissioner Bernier.

The only ground upon which, under section 323 of the Railway Act, the Board is authorized to disallow a tariff, or a portion thereof, is that it considers it to be unjust or unreasonable, or that it is contrary to some of the provisions of the statute.

In this case, the statutory notice of increase was given, and the tariff does not appear to be in any way contrary to any of the provisions of the Railway Act. The Board has no power to compel railway companies to give longer notice than that provided for by the statute.

While the previous existence of a particular rate affords evidence of its reasonableness, it is not conclusive evidence, but more or less cogent according to circumstances. In the present case, having reference to the nature of the service, the lowness of the rate per mile, and the opinion of the chief traffic officer of the Board, 'that, for the season of the year and the services performed, the rate is a reasonable one,' I do not think that the Board can properly find that the rate complained of is unjust or unreasonable. The board has no power to compel a railway company to reduce a rate which it does not consider unjust or unreasonable, merely for the purpose of encouraging traffic or of preserving the vested interests of dealers in a commodity, or others interested in its transportation.

Judgment in dissent, Mr. Commissioner Mills.

First, as to the notice given by the Grand Trunk Railway Company and Canadian Pacific Railway Company, of their intention to raise their rates 25 per cent—from 16 cents to 20 cents per 100 lbs.—on winter shipments of butter and cheese from Montreal to Portland, Me., and West St. John, N.B. Notice was given on the 1st November and the increase was made on the 1st December—30 days afterwards.

Notice of 30 days, under ordinary circumstances, would be quite sufficient. In some cases it might perhaps be more than could reasonably be demanded; but in this case, while sufficient in itself, it was not given at the right time; it was long enough, but not soon enough. It was withheld, or not given, till the greater part of the season's make of cheese had been shipped and the Montreal exporters had bought and stored most of what they required for winter shipment. Therefore, I think the complaint of the Montreal Produce Merchants' Association is well founded and should be favourably considered by the railway companies.

Second, as to the cartage in Montreal. I certainly think that the exporter or other shipper should be allowed to do his own carting, if he so desires. If the rates charged by the railway cartage companies are as low as those charged by other carters, shippers will undoubtedly patronize them in preference to private carters. If they are higher, why should not shippers be allowed to employ private carters or use their own teams to do the work? I have heard no satisfactory answer to this question, and I cannot think of any.

Third, as to the increase from 16 cents to 20 cents per 100 lbs. in the rate on winter shipments of butter and cheese from Montreal to Portland, Me., and West St. John, N.B.

The chief traffic officer (in his report, page 3) says that 'eliminating the rates of previous seasons and the revenue already earned on the bulk of the traffic.....

the rate (that is, the present 20-cent rate) is a reasonable one,' but this elimination assumes a condition of things which has not existed and does not now exist, and helps us only to a theoretical conclusion as to what, under non-existent conditions, would be a reasonable rate for the service rendered. On the same page, however, he proceeds to discuss the rate under the conditions which have existed and now exist. He says that if a lower rate had been maintained for a number of years, under practically the same conditions, 'the inference cannot be avoided that the lower rate must have been profitable, and, therefore, that the new rate is unreasonably high.' He shows that, with two slight exceptions, the rate was 16·07 cents from 1904 till the time of the increase on 1st December, 1906, and that prior to December, 1904, the rate varied from 14·47 cents to 18·22 cents, averaging 15·19. He calls attention to the fact that the rate of 15 cents per 100 lbs. on packing-house products between the same points is 25 per cent below the standard tariff, and that the 20-cent rate on butter and cheese is only 13 per cent under the said tariff, and concludes that, in view of all the facts and circumstances, the 20-cent rate is unreasonably high.

Therefore, I have not reached the same conclusions as my fellow Commissioners in this case. I approve of the recommendations of the chief traffic officer, 'that the companies be directed to reduce their rate from 20 cents to 18 cents per 100 lbs. on carload lots, and to give exporters the option of making their own arrangements for the cartage of their butter and cheese under the through rate and stop-over system;' and my judgment is to that effect.

April, 1907.

Re Wire Crossings. Conditions as to Indemnity.

Chief Commissioner Killam:

The question of requiring parties applying for leave to carry wires across railway tracks, to indemnify against injuries arising therefrom, is one that must be determined in each case according to the circumstances; but some general rules are applicable. It is a principle of law that a person storing or placing on his own land something which, in its nature, will be injurious to others if allowed to escape, is responsible to others for injuries caused through its being allowed to escape. This principle, however, is qualified by another, which is that, where a party is authorized by a statute to do anything, as the doing of it is, in such a case, lawful, he is not responsible for the injuries resulting therefrom to others. Unless, however, the statute specifically authorizes it, he is not empowered to enter upon or take the property of others without the consent of the owner. Where the statute gives this latter power, it usually provides for compensation to the owner of the property, and the courts consider that, unless the Act is clear, the presumption should be that the legislature does not intend to give the power without a right to compensation.

Companies authorized to construct railways and to operate them by steam, electricity or other power which involves danger to others, may lawfully do so without liability from any injury through the use of the necessary agencies for the purpose, unless the real cause of such injury is in the misfeasance or negligence of the company, its officers or employees. The same principle applies to companies authorized by the legislature to raise wire structures and transmit electricity thereby.

Railway companies are almost uniformly given the power to take private property without the consent of the owner: but provision is made for compensating such owner. Such provisions may differ in different statutes. Usually, such companies are not required to compensate parties, none of whose property is taken, for the discomfort, inconvenience or positive injury done them or their property by the operation of the railway. Where the company takes a portion only of one man's property, it is obliged to compensate him, not merely by paying the actual value of the piece taken, but also by paying for the injury done by separating it from the other portions of the pro-

perty; and usually, under most statutes, the courts consider that the use to which the company is to put the property taken and the injury which will thereby be occasioned to the previous owner in respect of the property retained by him, should be taken into account. But where a company is given the power to construct and operate a railway, an electrical transmission line or other work, and is now given power by the legislature to carry it across lands of another party without his consent, it must take that consent with such conditions as the owner sees fit to annex.

By section 246 of the Railway Act, 'No lines or wires for telegraphs, telephones or the conveyance of light, heat, power or electricity shall be erected, placed or maintained across the railway without leave of the Board.'

This merely imposes a condition which must be fulfilled in order to make it lawful to place electrical transmission wires over railway tracks. If that condition were not imposed, such wires could be placed over railway tracks only by consent of the railway company or by authority of the proper legislature. It may be that, in the absence of this stipulation, the authority of a provincial legislature would be sufficient. This clause does not, it appears to me, authorize this Board to empower a company authorized by the legislature to construct and operate electrical transmission lines to carry such lines over the property of a railway company without the consent of that company, unless statutory power is given by the proper legislature to do this. A railway company stands in this respect in no different position from any other property owner, and railway companies, like property holders, own the land *usque ad coelum*. There is no height above the surface of the earth at which the property holder is not entitled to the protection of the law against the invasion of his right. In the case of the Kaministiquia Power Company, we held that, where the line was being carried along a highway by the authority of the legislature—either direct or through a municipality—as the railway company was not given the ownership of the soil of the highway, but merely a right of constructing and operating its railway over the highway, leave should be given to carry the wires over the railway with the imposition of such conditions only as seemed requisite for the protection of person or property, thus leaving the power company liable only for breaches of the conditions imposed or for the misfeasance or negligence of the company, its officers or employees.

If the legislature gives to an electrical transmission company power to carry its wires and transmit electricity by them over a private property, it should be considered by this Board as having a right to do so upon the conditions imposed by the statute giving the authority, and should be given leave for the purpose upon such additional conditions only as we consider necessary for the protection of person and property leaving it liable for injury only as in the case of highway crossings. But if no such statutory authority is given it, we cannot give that authority, and the electrical company must submit to any conditions which the railway company ask, our function in such case being only to see that such precautions are taken as to remove as far as possible the risk to the public or others than the railway company; and if among the conditions sought to be imposed by the railway company is one of indemnifying the company, its employees and those using the railway against injuries from the works or their operation, whether due to negligence on the part of the electrical company, its officers or employees or not, that condition should, I think, be imposed by our order.

April 18, 1907.

Re Brown Brothers Company's Complaint.

Complainants complained to the Board that certain shipments of perishable stock delivered by them to the Canadian Northern Railway Company at Warman, Alberta, consigned to L. D. Daily, Vegreville, Alberta, were so delayed in transit as to become a total loss, and asked if there was no relief that the Board could give in the matter.

Held, Chief Commissioner Killam, that the subject-matter of the complaint was not one in which the Board could afford any relief; that section 284, subsection 7, of the Railway Act provided a remedy to any person aggreaved by neglect or refusal of a railway company to carry and deliver traffic without delay, that is, by action in the ordinary courts; that the function of the Board is to order the furnishing of accommodation and the appliances and means necessary therefor, in case of the failure of the railway companies to do so; that, as the complaint in question relates only to a particular previous shipment, no order that the Board could make would be of service to complainants; and that the Board was not created to take the place of the ordinary courts, but to exercise an entirely different jurisdiction. It was the function of the ordinary tribunals to award compensation for past breaches of the statute; that of the Board to prevent as far as possible future breaches.

April. 1907.

Re Ontario Lumber Company's Siding Agreement.

The Ontario Lumber Company, Limited, of Toronto, applied, under section 176 of the Railway Act, 1903, for an order directing the Canadian Pacific Railway Company to repay and refund to the applicant company the sum of $830 by way of rebate out of the tolls charged by the railway company in respect of the carriage of traffic for the lumber company.

Under an agreement between the applicant company and the railway company, the railway company undertook to construct a siding and to refund to the applicant company the said sum of $830, being the amount deposited by the applicant company as the estimated cost for the construction of the siding.

Held, that the Board had no jurisdiction to enforce the provisions of the said agreement under which the siding was built to the lumber company's premises; that at the time the agreement was made there was no provision in the Railway Act then in force corresponding to the provision in the present Railway Act, under which railway companies could be required to construct such sidings upon the condition, among others, that the deposit should be repaid by rebates from other roads; that the siding was constructed wholly under the agreement; and that the Board had jurisdiction only to enforce provisions of the Railway Act and not rights arising out of contracts.

June 27, 1907.

Re Robertson v. Grand Trunk Railway Company.

This was an application for an order directing the Grand Trunk Railway Company of Canada to issue third-class tickets at the rate of one penny for each mile travelled, and directing the company to provide at least one train having in it third-class carriages which shall run every day throughout the length of its line. The application was based upon a clause in the original Act of incorporation of the Grand Trunk Railway Company, which provided that the fare or charge for each first-class passenger by any train on the said railway should not exceed two pence for each mile travelled; the fare or charge for each second-class passenger by any train should not exceed one penny and one-half penny currency for each mile travelled; and that the fare or charge for each third-class passenger by any train on the said railway should not exceed one penny currency for each mile travelled.

These provisions have never been expressly repealed. The contention on behalf of the company was that they had been impliedly repealed by subsequent legislation.

By its special Act, the several clauses of the Railway Clauses Consolidation Act with respect, *inter alia*, to tolls, were made to apply to the company and its undertaking so far as these clauses were not inconsistent with the provisions of the special Act.

The Chief Commissioner, in his judgment, traces the history of railway legislation from the Railway Clauses Consolidated Act, 1851, down to the present time, so far as such legislation relates to the question of tolls.

The Railway Act requires a railway company to furnish adequate and suitable accommodation for receiving, loading, carrying and delivering traffic, and to furnish and use all proper appliances, accommodation and means necessary therefor; to afford to all persons all reasonable and proper facilities for the receiving, forwarding and delivering of traffic. The Act empowers the Board to order the company to furnish such accommodation where it has failed to do so, and power is given the Board to order that specific works be constructed or carried out, &c.

Held, that the clause requiring the running of third-class carriages and limiting third-class fares was not affected by any legislation prior to the Act of 1903.

Judgment, in part, of Chief Commissioner Killam, concurred in by the Deputy Chief Commissioner Bernier and Mr. Commissioner Mills:

'As has been said, the provisions of the special Act have not been expressly repealed. None of the enactments in the Railway Act, 1903, or in the present Railway Act, are explicitly inconsistent with those provisions. The contention on the part of the railway company is that, in effect, those enactments, and particularly the portions relating to tolls and those giving the Board jurisdiction respecting the accommodation, &c., to be furnished by the company, are so inconsistent as impliedly to repeal the provisions of the special Act.

'"If two inconsistent Acts be passed at different times, the last is to be obeyed; and if obedience cannot be observed without derogating from the first, it is the first which must give way." Per Lord Langdale, M.R., in Dean of Ely v. Bliss, 5 Beav., at p. 582. But a "repeal by implication is never to be favoured." Per Field, J., in Dobbs v. Grand Junction W. W. Co., 9 Q.B.D. at p. 158.

'"We ought not to hold a sufficient Act repealed, not expressly as it might have been, but by implication, without some strong reason." Per Lord Bramwell in G. W. R. Co. v. Swindow and Cheltenham R. Co., 9 A. C., at p. 809.

'"A later Act of parliament hath never been construed to repeal a prior Act, without words of repeal, unless there be a contrariety and repugnancy between them, or at least some notice taken of the former law in the subsequent one, so as to indicate an intention in the lawmakers to repeal it." Per Lord Hardwicke, L.C., in Middleton v. Crofts, 2 Atk. 650.

'The court must be satisfied that the two enactments are inconsistent before they can from the language of the later imply a repeal of an express prior enactment.' Per Byles, J., in Conservators of the Thames v. Hall, L.R., 3 C.D., at page 419; and in the same case Keating, J., said (p. 420): 'I entirely agree with my Brother Byles, that, before we come to that conclusion, we are bound to satisfy outselves that it is a necessary implication.'

'When the repeal is not express, the burden is on those who assert that there is an implied repeal to show that the two statutes cannot stand consistently the one with the other.' Per Chitty, J., in Lybbe v. Hart, 29 ch. D. 8.

The intention to repeal must appear even more strongly where the first provision is contained in a statute of a private or special nature, in which case the maxim *generalia specialibus non derogant* usually prevails. 'A later statute in the affirmative shall not take away a former Act, and *eo potior* if the former be particular and the latter be general.' Gregory's Case, 6 Rep. 19 b.

'The law will not allow the exposition to revoke or alter, by construction of *general* words, any *particular* statute where the words may have their proper operation without it.' Lyn v. Wyn, 2 Bridg., C.P. 127.

'The general principle is that a *general* Act is not to be construed to repeal a previous *particular* Act unless there is some express reference to the previous legisla-

tion on the subject or unless there is a necessary inconsistency in the two Acts standing together.' Per Bovill, C.J., in Thorpe v. Adams, L.R. 6 C.P. at p. 135.

'Unless two Acts are so plainly repugnant to each other that effect cannot be given to both at the same time, a repeal will not be implied, and special Acts are not repealed by general Acts unless there is some express reference to the previous legislation or unless there is a necessary inconsistency to the two Acts standing together.' Per A. L. Smith, J., in Kutner v. Phillips, 1891, 2 Q.B. 267.

'It is a fundamental rule in the construction of statutes that a subsequent statute in general terms is not to repeal a previous particular statute unless there are express words to indicate that such is the intention, or unless such an intention appears by necessary implication.' Per Bovill, C. J., in Reg. v. Champneys, L.R. 6 C.P. at p. 394.

'In order to show that a particular Act is repealed by a general Act by implication, it is not enough to show that the particular Act may have become useless or futile, that is to say, that the subject-matter of the particular Act comes within the terms of the general Act; it must be shown, as it seems to me, that there are enactments in the general Act, when rightly construed, inconsistent with the maintenance of the particular Act.' Per Brett, J., in Reg. v. Champneys, *supra,* at p. 404.

'Now, if anything be certain it is this, that where there are general words in a later Act capable of reasonable and sensible application without extending them to subjects specially dealt with by earlier legislation, you are not to hold that earlier and special legislation indirectly repealed, altered, or derogated from merely by force of such general words, without any indication of a particular intention to do so." Per Lord Sherborne, L.C., in Seward v. Vera Cruz, 10 A.C. at p. 68.

'See also the enunciation of similar principles by Sir W. Page Wood, V.C., in Fitzgerald v. Champneys, 2 J. & H. at pp. 53-61.

'But all of these statements admit that, if the intention of parliament to that effect sufficiently appears, the later Act should be construed as repealing or varying the former Act, whether special or general, and several cases have been cited in which the courts have adopted such construction. In most of these the circumstances and the nature of the enactments vary so much from those with which we have now to deal that they do not appear to afford us any material assistance.

'In these cases the principles before stated are not contravened; in some they are expressly acceded to. Usually, the decisions turned upon the view taken by the court of particular language or of the scope and intention of the legislation as understood by the court. I will cite from but two of them. In Daw v. Metropolitan Board of Works, 12 C.B., N.S. 161, Willes, J., said: "The rule of construction of Acts of parliament as laid down by Vice-Chancellor Wood in the London and Brighton Railway Company v. Board of Works, 26 L.C., ch. 164, is no doubt a very wholesome one. A subsequent general enactment will not derogate from a prior special enactment. When, as the learned judge says, the legislature has had a special case in view, and has specially legislated upon it, the inference necessarily is that it does not intend by a subsequent general enactment not referring to the former, to deal with those matters which have already been specially provided for. The rule *generalia specialbus non derogant* is properly applicable to such a case..... In the present case, however, the rule cannot apply. The powers conferred by the two are substantially, if not strictly, the same. So soon as you find that the legislature is dealing with the same subject-matter in both Acts, so far as the later statute derogates from and is inconsistent with the earlier one, you are under the necessity of saying that the legislature did intend in the later statute to deal with the very case to which the former statute applied." And in the Great Central Gas Consumers' Company v. Clarke, 11 C.B., N.S. 814, Keating, J., said: "I agree that, when we find in an Act of parliament a prohibition against a public company exacting more than a prescribed rate, we should require a very clear enactment in a subsequent Act to remove the

restriction, but it is equally clear that, if we find in a later Act of parliament provisions which are utterly inconsistent with those of an earlier Act, we are bound to give effect to the later provisions." And in the same case, 13 C.B., N.S. 838, Pollock C.B., said: "Although that section is not in terms repealed, yet it becomes a clause in a private Act, of parliament quite inconsistent with a clause in a subsequent public Act of parliament. That is sufficient to get rid of the clause in the private Act. Looking at the 19th section of the general Act, we think it is impossible to read it otherwise than as repealing the 24th section of the private Act. We are bound as well by the plain words of the Act as by the general scope and object of it, and also by the justice of the case."

'By section 3 of the Act of 1903, that Act was to be incorporated with and construed as one Act with the special Act, subject as in the general Act provided; and by section 5, in the event of inconsistency between the general Act and any special Act passed by the parliament of Canada relating to the same subject-matter, the provisions of the special Act were to be taken to override the provisions of the general Act in so far as should be necessary to give effect to the special Act. These provisions are combined in section 3 of the present Railway Act. This would settle the matter if the special Act had been one passed by the parliament of Canada, in which case, although earlier than the general Acts, the provisions of the special Act would prevail. But the portion of the Grand Trunk Railway to which the present application refers was constructed under a special Act of the late province of Canada. I have some doubt whether section 6 of the Act of 1903, and the similar section of the present Railway Act, under which the general Act is to apply to the exclusion of such of the provisions of a special Act of a provincial legislature as are inconsistent with the general Act, were intended to cover the case of a special Act passed by the parliament of the province before the union. The definition of the terms "legislature of any province," and "provincial legislature," in section 2, subsection (r) of the Act of 1903, and section 2, subsection 20 of the present Act, is probably wide enough to include such parliaments; and the Grand Trunk Railway was declared by an Act of the parliament of Canada to be a work for the general advantage of Canada. That declaration was included in an Act amending the general Railway Act, which, though referring specifically to the Grand Trunk Railway and other named railways, may not come within the definition of a "special Act." The Grand Trunk Railway was a railway connecting one province with another, and thus became *ipso facto*, upon the formation of the Dominion, subject to the legislative authority of the parliament of Canada without a declaration that it was a work for the general advantage of Canada. Section 6 was probably intended to apply to railways constructed under special Acts of provincial legislatures passed after confederation.

'Possibly, however, this may not be important, since section 6 embodies the most important of the beforementioned principles, that the prior special Act is repealed or affected by the general Act only where there is inconsistency between them; and I take it that, under either view, the burden is upon the party asserting it to point out the inconsistency, and that this should be made clear.

'The clause in the special Act is two-fold: It limits the fares for different classes of passengers, and it requires the running of third-class carriages. Necessarily, under the later portion, there was some obligation upon the company to furnish reasonable accommodation; some obligation to give some attention to the comfort and convenience of third-class passengers, even though this accommodation and attention should not be of the same character as required for the other classes. The legislation requiring the furnishing of adequate and suitable accommodation and the affording of reasonable and proper facilities, could certainly not affect a repeal of the provision for running third-class carriages, nor, in my opinion, can the legislation empowering the Board of Railway Commissioners to make regulations providing for the protec-

tion, safety, accommodation, and comfort of the public. Whatever the obligations under the present Act or the former Acts, these could not satisfactorily be enforced by the ordinary methods in the ordinary tribunals. The Board of Railway Commissioners was created to be the tribunal for the settling of these and other matters affecting railways and railway companies. It does not appear to me that the creation of such a tribunal was in any way inconsistent with the continuance of the obligation imposed by the special Act, or could affect its repeal or evidence an intention of parliament that the obligation should be no longer effective.

'Under the Railway Clauses Consolidation Act and all the succeeding legislation, down to the Act of 1903, railway tolls were subject to the approval of, and to be altered by, the Governor in Council. This limitation upon the company's powers was embodied in the special Act by reference to the general Act. The jurisdiction of the Governor in Council could exist, therefore, consistently with the limitation as to fares imposed by the special Act, and it does not appear to me that the substitution of the Board of Railway Commissioners as the body which is to approve, and which has the jurisdiction to alter, railway tolls, makes any change in this respect. Under the former legislation, all the railway tolls required the approval of the Governor in Council; under the present, it is only the standard of maximum tariffs which must be approved by the board; and railway companies are authorized to make special tariffs imposing tolls lower than those in the standard tariffs. The practice has been for the companies to obtain approval of standard passenger tariffs, not distinguishing between classes, and to provide for second-class fares by special tariffs. Third-class fares could be provided for in the same way. I do not think that the provisions requiring special tariffs are necessarily inconsistent with the limitations imposed by the special Act or that they are sufficient to indicate the intention of parliament that the company, in framing special tariffs, was to be free from such limitations.

'I am not informed whether the third-class carriages were at any time used upon the company's railway. To my mind it is clear that the obligation to use them, and to carry at fares limited as in the special Act, continued up to the coming into force of the Act of 1903. I am unable to find in the subsequent legislation any sufficient indication of parliament to abolish the system originally imposed upon the company as having become obsolete or unnecessary. The imposition of this system was one of the terms and conditions upon which the company was granted its franchise, and it should not readily be presumed that parliament intended to relieve the company from such terms and conditions.

The application is limited to the portion of the Grand Trunk Railway between Toronto and Montreal, and it is unnecessary to consider whether the obligation ever extended to any other portion of the company's lines.

'In my opinion, there should be an order requiring the company to run every day throughout the length of its line between Montreal and Toronto at least one train having in it third-class carriages, and forbidding it to charge third-class passengers fares at more than two cents per mile, and directing it to amend its special tariffs accordingly.

The operation of this order, however, should be stayed a sufficient time to enable the company to appeal.'

Ordered accordingly.

An appeal from the board's order now pending before the Judicial Committee of the Privy Council.

Ottawa, July 4, 1907.

SESSIONAL PAPER No. 20c

Re Galt Board of Trade Application for Connections with the Canadian Pacific, Grand Trunk and Galt, Preston and Hespeler Railway Companies.

This was an application by the Galt Board of Trade, under section 228 of the Railway Act, for an order directing the above-named railway companies to connect their lines or tracks, in the town of Galt, province of Ontario.

Held, after the hearing of the parties interested, that an order should go requiring the Canadian Pacific Railway Company to make connection between its line and that of the Grand Trunk Railway Company at Galt, so as to admit of the safe and convenient transfer or passing of engines, cars and trains over the tracks or lines of one of the said companies to those of the order; and that such connection be maintained and used, the plans of location of the connecting line and of connections with the existing lines first submitted to and approved by the Board.

Held, further, that the order should direct the Canadian Pacific Railway Company, within one month from the issue of the order, to submit to the Board a plan and profile of the proposed connecting line and all connections with the existing lines and the connections thereof with the existing lines or railway of the two companies. The applications for connection with the electric railway company to stand for negotiations between the parties.

Ordered accordingly.

November 12, 1907.

Re Application of the Village of Weston for a Highway Crossing at Dennison Ave.

This was an application by the village of Weston, in the province of Ontario, under sections 250 and 237 of the Railway Act, for an order directing the Canadian Pacific and the Grand Trunk Railway Companies, *inter alia,* to construct and provide a public crossing at the east end of Dennison avenue.

Judgment, Chief Commissioner Killam, concurred in by the Deputy Chief Commissioner Bernier, and Mr. Commissioner Mills: 'While the railway companies put up warning notices and occasionally closed gates on each side of their lines, thereby preventing any inference of intention to dedicate these portions of their lines to public use as a highway crossing, they took no effective steps to put a stop to their actual use by the public for this purpose, and the public have used the same for many years. Such a course of proceeding is highly objectionable. Railway companies should either fence off their lines and take steps to prevent the unlawful crossing of their tracks, or allow public highways to be placed across them where the public interests demand such a course. In tacitly conniving at these trespass crossings while endeavouring to protect themselves from liability in respect of the same, they are maintaining a public danger and ought not to expect the same consideration of their interests as in cases where it is sought to construct entirely new highway crossings over their railways. The multiplication of level highway crossings is certainly undesirable, but not so undesirable as the illegal level crossings.

'The order of the Board directed the railway companies to provide and construct a highway across their respective lines of railway at the east end of Dennison avenue, in the village of Weston, and reserved the question as to the protection of the said crossing for further consideration.'

November 13, 1907.

Application of the City of Winnipeg for leave to build a bridge over the Canadian Pacific Railway in the city, to be used as a public highway connecting Brown and Brant streets, in that city.

These streets are almost in the same line; the one on one side and the other on the other of the yard and tracks of the Canadian Pacific Railway Company.

Although the public were in the habit of crossing the tracks of the railway company near the place where the proposed bridge was sought to be put, and planking maintained there for convenience in crossing, it was not claimed that any highway ever existed over the land occupied by the railway company in the line of these two streets or either of them.

The railway company did not object to the proposed over-crossing itself. The question was whether the company should contribute to the cost of the work.

By section 237 of the Railway Act, when an application is made for leave to construct a highway across an existing railway 'the Board may, by order, grant such application upon such terms and conditions as to protection, safety, and convenience to the public as it may deem expedient, or may order that the highway be carried over or under the railway, or be temporarily or permanently diverted.....'

By section 59, 'When the Board, in the exercise of any power vested in it by this Act or the special Act, in and by any order directs any structure, appliances, equipment, works, renewals, or repairs to be provided, constructed, reconstructed, altered, installed, operated, used, or maintained, it may order by what company, municipality or person interested or affected by such order, as the case may be, and when or within what time and upon what terms and conditions as to the payment of compensation or otherwise, and under what supervision the same shall be provided, constructed, reconstructed, altered, installed, operated, used, and maintained.'

'2. The Board may order by whom, in what proportion, and when, the cost and expense of providing, constructing, reconstructing, altering, installing, and executing such structures, equipment, works, renewals or repairs or of the supervision, if any, or of the continued operation, use, or maintenance thereof, or of otherwise complying with such order, shall be paid.'

Judgment, Chief Commissioner Killam, concurred in by Mr. Commissioner Mills:

'While upon its face, section 59 appears to give the Board absolute jurisdiction to compel any company, municipality, or person interested or affected by the order to pay or contribute to the payment of such compensation, it cannot have intended that the Board should exercise such discretion arbitrarily without reference to the respective rights of parties interested or affected or proposed to be affected.

'If the property were that of a private person, through whose lands the city could carry a highway without his consent, the city would ordinarily be liable to compensate the landowner for the property taken and for the injury caused by the severance of the remaining property. In some cases the legislation provides for an allowance for any advantage which the property owner may derive from the contemplated work, or that the cost of the same be assessed upon the lands of the parties interested in or benefited by the work.

'The bridge now proposed to be erected can be of no benefit or advantage to the railway company. It will rest, in part, upon and thus occupy the surface of the company's lands, and it will extend through an upper space, which, by virtue of its ownership of the soil, is the property of the railway company. There seems to be no reason or principle upon which the railway company can be required to defray the cost of such a work or any portion thereof.

'I think that the city should have leave to construct the work at its own expense.'

November 15, 1907.

Re Bell Telephone Company and Windsor Hotel Agreement.

In the month of November, 1906, the Bell Telephone Company and the Windsor Hotel Company entered into an agreement for the installation of a telephone system by the telephone company in the Windsor Hotel.

As the telephone company's tolls had to be approved by the Board, the execution of the agreement was left in abeyance until the Board should have had an opportunity to consider the agreement, in so far as it related to telephone tolls.

The main points as to which there could be considered to be any question, and with which the board dealt, were:—

1. The clause providing for exclusive use of the Bell telephone system in the building.
2. Rental of instruments.
3. Rates for local messages.
4. Long-distance rates.
5. Terms of agreement.

Judgment, Chief Commissioner Killam, concurred in by Mr. Commissioner Mills:

1. *Exclusive rights.*—I see no reason why the hotel company should not bind itself to take the Bell system only. No other is at present in sight, and the introduction of another would require considerable time. The Bell Telephone Company's rates being now subject to control by our Board, there seems to be no serious objection to such a stipulation.

2. *Rental of instruments.*—This is an agreement of a peculiar character. Very few of them are likely to come before the Board for consideration, and those that do will probably have different features. The size, situation of the hotel, number of rooms and of telephones will vary. I see no reason why the hotel company should not be allowed to agree to pay the rental stipulated in this proposed agreement. We should presume that the company is controlled by business men who are able to make their own agreements.

3. *Rates for local messages.*—The telephone company stipulate for a rate of 10c for connection. The impression that I have formed is that this rate, under the circumstances of the service, is not an unreasonable one. My present inclination is to the view that if telephone rates are to be in any respect reduced, that reduction should come, in the first place, from the annual charges to regular subscribers, and, secondly, from long-distance rates, leaving the 10c. rate for casual messages as at present; but it would probably be wise to provide that this rate is to be subject to any reduction which the Board may at any time order.

4. *Long-distance rates.*—The agreement (par. 17) provides for payment of 'the telephone company's regular toll charges.' These charges must be made at rates approved by the Board, so that there can be no objection to this stipulation.

5. *Terms of agreement.*—I would provide that, after the period of ten years, any extension shall be subject to the approval of the Board.

I think that we may properly approve the agreement with the two conditions which I have mentioned:—

1. That the charge of 10c. for each connection had over any telephone hereby leased with the Montreal exchange subscribers of the telephone company shall be subject to reduction at any time by the Board.

2. That any extension of the term of the agreement after the expiration of ten years shall be subject to the approval of the Board.

November 23, 1907.

Re The Robertson-Godson Company's Complaint.

The Robertson-Godson Company complained to the Board that they were assessed a class-rate by the Canadian Pacific Railway Company on a shipment of paving blocks from Edmonton to the Pacific coast, whereas the lumber rate should have applied, which meant, they alleged, a considerable loss to the company. The railway company took the position that the lumber rate did not apply, as that rate could only relate to those articles specifically mentioned in its tariff filed with and approved by the board, and that this list of articles did not include street paving blocks.

The complainants' contention was that paving blocks were nothing more than fire lumber, and, therefore, should be included in the classification. They asked the

ruling of the Board as to whether their contention was correct or not, and, if correct, whether they were not entitled to a refund.

Held, that the Board had no jurisdiction to direct or authorize the railway company to make any rebate in the rates charged under tariffs lawfully existing when the goods were carried, and that the only action which the Board could take would be to require that paving blocks be included in the commodity tariff; but that this action could not affect past transactions.

November 29, 1907.

Re Vancouver, Victoria and Eastern Railway and Navigation Company's Application to Expropriate Lands in the Municipality of Delta, B.C.

In August, 1907, the Board made an order authorizing the Vancouver, Victoria and Eastern Railway and Navigation Company 'to divert the Ladner highway along the Fraser river, known as the River road, in the said municipality of Delta, to the extent and in the manner shown in pink as route No. 2 on the plan and profile on file with the Board.....; and to maintain, construct, and operate its railway along and upon the existing portions of the said highway between the points of diversion.'

On the 29th October of the same year, the railway company applied, under section 178 of the Railway Act, for authority to expropriate certain lands for the purpose of the diversion of the highway mentioned above, under the Board's order. The land sought to be taken was a strip coloured red on the plan accompanying the application, and was necessary for the highway along the route prescribed by the Board's order. The company's application stated 'that, by-law dated the 12th day of November, 1906, the municipality of Delta gazetted a highway between the termini of the diverted highway and the land coloured red on the plan filed herein practically coincided with the said highway except where it is of a greater width than 66 feet, and then only as to the excess and also where it crosses the ravine on lot 16, group 2.'

The application also alleged 'that it is necessary, in order to construct the diverted highway in accordance with the order of the Board of Railway Commissioners for Canada, to take the whole of the land coloured red on the plans filed herein—where the land required is of a greater width than 66 feet the road crosses ravines or follows along steep hillsides—and the width shown is necessary in order to construct the said highway, and for no other purpose.'

Another of the parties whose property was sought to be taken filed answers stating merely that it was not necessary for the company to take the lands referred to in the application. By consent of the parties the application came on for hearing at Ottawa, when the question of the necessity for taking the land coloured red on the plan was not raised; but counsel for a number of the landowners requested that certain conditions be imposed upon the railway company. These conditions were referred to the railway company by its counsel, which refused to accept the terms, except one for allowing rights of crossing on foot over the railway to the river. The River road ran along the river bank in some places close to the foreshore; in other places leaving small pieces of land between it and the river. The Fraser river opposite the place in question is a tidal navigable river. Counsel for the landowners stated that the township of Delta had passed a by-law for the diversion of the highway practically covering the diversion ordered by the board. The railway company claimed to have a grant from the provincial government of the foreshore along the diverted portion of the highway.

At a later hearing one of the conditions asked for by counsel for the landowners was expressly abandoned, and two others not really insisted upon. Those asked for were, first, a condition requiring the company to pay compensation to the landowners for the portion of land on which the railway was built, upon the basis that the land on which the railway runs reverts to the owners of the adjoining lands upon the closing of the highway. Condition two—that the company pay compensation to the

owners of the land for the right of way over the diverted highway; and the third condition was one for certain crossings and the right to build and maintain landings and net houses on the company's right of way next the river and opposite the lands of the respective owners.

Judgment, Chief Commissioner Killam, concurred in by the Deputy Chief Commissioner Bernier on December 26, 1907.

Referring to the first condition sought to be imposed:

'It is not at all clear that such is the effect of the diversion; if so, the party in whom the land occupied by the old highway vests will naturally be entitled to compensation for the taking of his land by the railway company. If such is not the effect, then there is no reason why compensation should be given on such a basis. If the municipal by-law was sufficient of itself for the diversion of the highway and to close the old highway to public traffic, the question of the landowners' right to compensation must be determined by the local law and by the local courts. If it was not sufficient and the closing of the old highway is affected by the exercise of the company's powers under the Railway Act and the board's order, the landowners should be left to take such compensation as under the Railway Act they are entitled to. This application is one for taking a strip out of another portion of their lands, and it does not appear that any condition should be imposed not directly relating to the taking of the land for which authority is now sought.'

Referring to the second condition:—

'It is not necessary to impose a condition for that purpose. The parties whose lands are taken have a right to compensation under the Railway Act for the taking of their land and the injury done by severance of the remainder. This is admitted by both parties.'

Referring to the third condition:—

'As I have said, the railway company is willing that foot crossings should be allowed to these owners. Apparently the land is not suitable for crossing otherwise than on foot, and it is reasonable that these parties should have crossings in the nature of farm crossings, particularly those whose holdings extend to the river side. These latter need no condition to enable them to have landings and net houses. As to those whose land does not extend across the highway, it is reasonable that they should have access to the water; but there seems to be no reason for imposing upon the railway company an obligation to give up for the purposes of landings or buildings any land not belonging to the parties whose lands they are taking. I think that the order authorizing the company to take the land applied for should be granted, with conditions that the foot crossings, to which Mr. Ritchie at the last hearing limited his request, shall be allowed by the company.'

Order, dated December 26, issued accordingly.

Judgment in dissent, Mr. Commissioner Mills:—

'I am strongly of the opinion that the Railway Commission should not open the way for law-suits, nor advise people to go to the local courts to determine and obtain their rights, unless it is really necessary to do so.

'Taking the case of six or seven poor fishermen on the banks of the Fraser river, in the township of Delta, B.C., I think it is cruel to send them to the local courts to settle the points at issue between them and the Great Northern Railway Company, when the problems submitted can be solved and the suggested law-suits avoided simply by putting into the order for expropriation the terms and conditions on which the railway company can obtain the rights and privileges for which it has applied under section 178 of the Railway Act.

'It is possible that these concessions or conditions should have been imposed when the application for approval of location was under consideration; but I, for one, was not aware of the facts at the time; and I would rather vary the order approving

of the location, if that is necessary, than send such people to the courts to obtain their rights. I maintain, however, that these rights can be secured by imposing conditions in the order now applied for.

'*As* nothing is gained by dissenting judgments, I have ventured to submit an alternative draft order embracing two conditions not yet approved of by my colleagues; and I wish to state briefly my reasons for asking that these conditions be imposed upon the applicant company.

'*First.*—As to the compensation of the owners of land, for the portions of their land which were formerly given for the river bank road, which portions the railway company has recently been authorized to take. The company contends that, inasmuch as it has to buy land for a new road on the hillside, it should not be required to purchase any portion or portions of the road which it is taking along the river bank. I think, however, that the claim of the landowners is a reasonable one, because they gave their land along the river bank without compensation, for the purpose of getting a level or comparatively level road in that locality. This road is now taken from them for the benefit of the railway company; they are deprived of the benefits which the grant of that portion of their land was made to secure; and a very crooked road at an elevation of 93 feet up the hillside is not equivalent for the road of which they are deprived.

'I think that any one who notices how crooked the proposed road on the hillside is and bears in mind that, according to the statement of our engineer, it involves an ascent of 93 feet above the level of the present road, will admit that it is not, in any proper sense, an equivalent for the latter; and that, therefore, the railway company should not only provide and construct the inferior high-level road, but pay the complainants for the portions of their land which were given for the comparatively level and much better road by the river.

'This is my reason for thinking that the request of the people set forth as condition 3 in the draft order submitted should be granted.

'*Second.*—Inasmuch as the men herein referred to are all fishermen depending upon access to the river for their livelihood, they should not be refused the right to construct net houses and landing-platforms along the river bank. To refuse them this privilege is to drive them out of business, making the remainder of their land valueless and compelling them to go elsewhere. This, I think, is something which the board should not do; and, for that reason, I would suggest that they be each allowed to build a net house or net houses and a landing-platform or platforms on the right of way of the applicant company, where it comes to, or within 25 feet of the Fraser river, provided he does not occupy more than 80 feet of space along the river bank and does not build, construct, or place any structure or thing within 25 feet of the centre line of the right of way of the applicant company.

'Application was made for permission to occupy, for such purposes, the land on the river bank, to within 20 feet of the centre line of the railway track; but, with a view to provide for the possibility of a double track, I have increased the space to 25 feet from the centre line of the right of way, allowing the applicants, for the length of 80 feet on each lot, to use the right of way for a width of only 25 feet (instead of 30 feet), wherever the said right of way comes within 25 feet of the river; and I am making this suggestion as a compromise, in the hope that it may be approved by my colleagues—granting the landowners the privilege of building and using net houses and platforms as above, on condition that they keep distant 25 feet, instead of 20 feet, from the centre line of the right of way of the railway company. (See sketch of right of way and double track line submitted herewith.)

The death of Chief Commissioner Killam having occurred before the above suggestions were considered, and the Deputy Chief Commissioner having since concurred in the judgment of the late Chief, I have to dissent from the said judgment and the order based thereon.

Re Complaint of C. R. Banks.

This was a complaint against the Dominion Atlantic Railway Company, alleging that as a result of delay in forwarding a consignment of cornmeal shipped by the St. John Milling Company of St. John, N.B., to complainant at Torbrook Mines, in Annapolis county, province of Nova Scotia, complainant suffered a loss of 10 cents per hundredweight, amounting in all to $30; and applied to the board for redress.

Held, that the Board had no power to award complainant damages for the delay; that the complaint was in respect of one single shipment, and there was nothing to indicate that such delays were frequent or that the investigation was necessary for the purpose of devising a remedy for a defective system; that the remedy of the party aggrieved was to be found by action in one of the regular courts; and referred complainant to subsection 7 of section 284 of the Railway Act.

January 23, 1908.

Re Highway Crossings over Railways.

If there is no established highway over the railway, the board has no power to compel the railway company to make and maintain such a crossing. The board's jurisdiction is confined to giving to the municipal authorities the power to carry and construct a highway across the railway.

Chief Commissioner Killam.

January 28, 1908.

Re Moor Lake Accident.

This accident was the result of a head-on collision at Moor lake between the Canadian Pacific Railway Company's passenger train No. 8, coming east, and extra engine 1715, going west, on the night of November 14, 1907, near Moor Lake, in the province of Ontario, in which the engineer was killed and a number of passengers more or less seriously injured, and the mail car, with its entire contents, including a very large number of registered letters and articles and ordinary mail matter, were completely destroyed.

Application was made to the Board by the Post Office Department, and the representatives of the engineer killed, for a copy of the report of the Board's inspector.

Held, that the inquiries and reports of its accident inspectors are made for the purpose of informing the Board in the public interest only, and in order to enable the Board to judge of the causes of accidents and the rules and precautions to be made and taken for the purpose of avoiding them in future, and not for the purpose of giving information to parties desirous of making claims against a railway company for injury to person or property; that this rule was adopted not only because the Board did not consider that its function was to obtain information for the purposes stated, but also because the Board did not desire that railway officials should be deterred from giving information to the Board's officials through fear that it would be used in support of claims against the companies.

January 29, 1908.

Re Complaint of J. Wilson v. Canadian Pacific Railway Company.

Complainant's horses got on the track of the Canadian Pacific Railway Company between Nanton and Parkland, in the province of Alberta, at a public crossing and were killed. It was alleged that there were no guards of any kind to keep the horses from getting on the track, and estimated his loss at $850.

The Board took the matter up with the railway company, and was informed that proper cattle-guards had been installed at the crossing.

Held, that the Board has no power to compel railway companies to pay claims for damages for cattle killed upon railway tracks, as the statute expressly provides that the remedy is to be by action in a court of competent jurisdiction; that the Board's only function in this respect is to see that provisions of the statute respecting fences, cattle-guards, &c., are properly observed.

February 8, 1908.

Re Basil H. Malaher's Complaint.

Basil H. Malaher, of Marshall, in the province of Saskatchewan, the complainant, alleged that he had been overcharged the sum of $9.97 on the carriage of goods from Liverpool, *via* Halifax, to Floydminster, the nearest station to Marshall. Under the bill of lading the sum of $20.94 was to be paid. The amount charged and collected by the agent of the Canadian Northern Railway Company at Floydminster was $31.90, making an overcharge, as alleged, of $9.97.

Held, Chief Commissioner Killam and Deputy Chief Commissioner Bernier, after inquiry into the subject-matter of the complaint, that the Canadian Northern Railway Company had received for carriage from Emerson, Man., to Marshall, in the province of Saskatchewan, only the lawful rate of 25 cents per 100 pounds; that the charge made to complainant for the whole carriage from Liverpool to Marshall, Sask., was in accordance with the lawfully existing joint through tariff, and that the Board had no jurisdiction to enforce any special contract for rates other than those set out in the lawfully existing tariff, or to compel either the railway company or the steamship company to make any reduction from this charge; and that any relief to which the complainant would be entitled could only be obtained by action in the ordinary courts.

February 12, 1908.

Re Application of the Village of Mannville, in the Province of Alberta, for Crossing the Canadian Northern Railway Company's Line of Railway.

This was an application, under sections 252 and 253 of the Railway Act, for an order directing the Canadian Northern Railway Company to provide and construct a suitable street crossing where the railway company's railway interests the village of Mannville, in the southeastern quarter of section 50, range 9, west of the fourth meridian.

Under 'The Village Ordinance' of the Northwest Territory Ordinances, cap. 72, 1905, no authority is conferred upon villages in the province of Alberta to open up highways across private lands.

Held, that the Board had no power to compel railway companies to open up highways across their lands; the function of the board, under section 237 of the Railway Act, was to give leave to a municipality or other authority having power to open up new highways, to do this across a railway; but this legislation is based upon the view that the railway company's land has been devoted to a statutory use; and that, in the absence of statutory provision therefor, the municipality or other road authority could not construct a highway over the railway lands.

February 13, 1908.

Re Robertson and Chatham, Wallaceburg and Lake Erie Railway Company.

This was an application by Arthur K. S. McA. Robertson for rescission of an order of the board granting leave to the Chatham, Wallaceburg and Lake Erie Railway Company to carry its line of railway upon and along certain streets in the city of Chatham. The applicant's objection related only to the portion of the railway to be carried along Queen street and to its location on the street opposite property of the applicant. Under the order, the railway was authorized to be located on the side of

the street next the applicant's property, the centre line of the track to be nine feet four inches from the centre line of the street. The applicant asked that it be located in the centre of the street, and claimed that the approved location was very injurious to his property.

The plan showing the location of the railway in the city of Chatham was approved by the Board, subject to the terms and conditions set forth in by-law No. 815 of the city of Chatham. This plan showed the railway to be apparently located along the centre of Queen street. The by-law referred to was one authorizing the city to lend to the railway company a certain sum of money, and provided, among other things, that before the work was commenced on any section or portion of the company's railway in the said city of Chatham, the plans setting forth the proposed location of the company's tracks were to be first submitted to the engineer of the city for approval and should not be altered thereafter without the consent of the said engineer; and that no work should be done by the company upon any of the streets of the city until the engineer had approved of the location of the same.

By by-law No. 946 the company was authorized, 'subject to the terms of an agreement to be entered into between the corporation of the city of Chatham and the Chatham, Wallaceburg and Lake Erie Railway Company, to lay down and construct a street railway upon the following streets, or portions of streets.' Among these was Queen street, from William street to the southern limit of the city. By the by-law it was provided that the location of the line of railway in any of the streets aforesaid should not be made until plans thereof showing the position of the rails, poles and wires were submitted to and in writing approved of by the city engineer and chairman of the industrial committee, or of such other committee as the council for the time being should appoint for the purpose.

By by-law No. 1013, reciting the previous by-laws, and that it was 'desirable to define the terms of the agreement to be entered into as aforesaid under the said by-law No. 496,' many provisions were made respecting the company's railway, among which were the following:—

'(25) The location of the line of the said railway on the said streets, and the position of the rails, switches, turn-outs, and other works thereof, shall be shown upon plans, with figured dimensions showing the distance of all their works from the side lines of the streets, which shall be submitted to the said engineer and chairman of the industrial committee, or of such other committee as the council for the time being shall appoint for this purpose, and none of the said works shall be commenced until the said plans have been submitted to and approved of as required by section 9 of said by-law No. 946, and the same shall not be altered thereafter without the consent of the said engineer and chairman.'

By the indenture between the company and the city, reciting the several by-laws mentioned, the company accepted the by-laws and covenanted and agreed that it would in all things conform to, obey, perform, observe, fulfil and do all and every the terms, agreements..... in the by-laws contained, and would do and perform all matters and things which the by-laws provided to be done by or on behalf of the company, and would not do anything which the by-laws provided was not to be done by the company.

At the hearing at Chatham of the application of the company for leave to carry and construct its railway upon and along certain highways in the city of Chatham and in other municipalities, it was stated that, under by-laws 815 and 946, the city granted a franchise on certain named streets (among which was Queen street), and reference was made to the approval by the board of the location plan, but the proposed location of the railway upon the streets was not otherwise specified. The result of the hearing was that the order was to go subject to the filing of certain plans and the agreements. The plans subsequently filed showed a location on Queen street west of the centre line of the street.

Later, the Board made an order granting leave to the company to carry and construct its railway upon, along and across certain named streets (among which was Queen street), as shown on the plan submitted, subject to the terms and conditions of the laws and agreement mentioned. The order not to issue until the plan had been first approved by the city.

Judgment, Chief Commissioner Killam: 'When the matter came before the Board at Chatham in December, 1905, the Board required to be satisfied, by production of the by-laws and agreements, that the necessary consent of the city to the carrying of the line along the streets had been given. When these by-laws and agreements came to be produced, it appeared that the locations upon the streets were to be fixed by officials of the city, and the Board was furnished with evidence that these officials had fixed the location along Queen street as approved by the Board's order.

It appears to me that it was quite competent for the Board to give leave to carry the railway along a different portion of the street from that set out in the plan to which the application referred, without requiring the making of a new application—and this, whether the change was made at the request of the railway company or against its will.

It appears to me that it was quite competent for the Board to give leave to carry the railway along the street upon a location different from that shown by the location plan approved by the Board. In approving a location plan, the Board does not usually determine precisely where a railway shall cross another railway, or where it shall run across or along a highway; and when the application to cross another railway, or to cross or run along a highway, comes before the Board, it might allow this at a different place or upon a different location from that laid down upon the approved location plan without requiring another location plan to be submitted or an application to be made to authorize a deviation; and the Board's order in such a case is sufficient to authorize the necessary deviation.

When the order in question was made, the Board had been furnished with the evidence of the location upon Queen street, fixed by the proper city officials under the by-law for this railway. The formal plan embodying this conclusion had not reached the Board, but the Board might well determine upon the material that the railway should be allowed to be carried along the street as approved by the city officials, and it might well entrust to its secretary, to whom the order was to be forwarded to be sealed and issued, the duty of examining the plan and ascertaining that it indicated the line as thus approved. I think the Board could thus make the order, although when it was signed the plan was not yet in the secretary's hands, but to be issued after the receipt of the plan and the making of the comparison which the secretary was directed to make.

The company's application for leave to place its railway upon the public street was not a 'complaint,' which, under section 20, the Board was bound to hear and determine in open court on application by any party to it. But the request for a hearing was not one which the Board would ordinarily refuse, and in this case, in view of the agreement for a settlement of the injunction proceedings, the order should not have been made without such a hearing. All of the parties—the city, the railway company, and Robertson—have now been heard and have adduced such evidence as they saw fit upon the question of the location of the railway along Queen street in front of Robertson's property. The railway has been constructed along the side of the street in accordance with the location prescribed by the city engineer and chairman of the committee except opposite Robertson's property, where it has been temporarily carried along the centre of the street. The chief engineer of the board has reported that he is 'of opinion that, as the present road is a country road and not paved, the track should go as the plan originally intended—to one side; but that, if in the future Queen street should be paved as similar streets in Chatham, the tracks could be moved to the centre at very little expense.'

I think it is clear that the placing of the railway along the centre of the street would interfere unduly with the use of the street, and be injurious to the public interest. On the other hand, I have no doubt that the placing of the railway where the company and the civic officials desire to place it would injuriously affect Robertson's property. I am, however, of opinion that the construction and operation of the railway will materially benefit the property, and that the property, with the railway upon the side of the street, will be more valuable than if the railway should not be, or had not been, constructed at all. At present, the land is wholly vacant, a few scattered dwellings are to be found on the other side of Queen street, and there is a probability that the city will grow in that direction and that there will at some time be a demand for lots in that locality for residences, factories, warehouses, &c. The opportunity to procure spurs from this railway should enhance the value for industrial or commercial purposes. While there is not at present a frequent passenger service upon the railway, this must naturally be increased with the growth of the city. At one time Robertson proposed to widen the street in front of his property by giving up a strip along it for the purpose. This fact affords some evidence that such a use of this strip would leave him with property not less valuable than the whole would be if he retained the strip. If he should now widen the street in this way, the railway would then be along the centre of the street, and the remaining property, with the advantages afforded by the railway, would probably be more valuable than the whole is at the present time.

It appears to me that, if we were now hearing the original application, and had before us the evidence which has been given and the arguments advanced on Robertson's behalf, we should still make the order unconditionally, giving the company leave to carry the railway along the street as is proposed by the company and the city.

Judgment, Deputy Chief Commissioner Bernier: "In this case two principles are involved:

'1. The control, as trustee for the public, of the streets within the limits of the city of Chatham, which, by by-laws, has determined that the electrical road of the Chatham, Wallaceburg and Lake Erie should be located according to the decision of its officials.

'2. The claim for damages to property owners alongside the streets where the said electric road was to be constructed and operated. I have already expressed my views with regard to the absolute power of the municipalities to fix and determine the terms and conditions with which the railway intended to be constructed would have to comply; the Board to conform its order accordingly. As to the question of compensation or damage, it rests entirely between the immediate landowners and the municipality which has chosen the location of the railway, and to be determined by the ordinary courts of justice.

'The Board is not in a position to fix the compensation, as the damage cannot be appraised without the intervention of the municipality and the parties who may suffer by its decision; such power, in my opinion, not having been granted to the Board.

'My opinion, therefore, is that the order should go according to the decision of the city of Chatham, leaving to the interested parties their recourse to the ordinary tribunals.'

Judgment in dissent, Mr. Commissioner Mills:

The council of the city of Chatham, wishing to have the Chatham, Wallaceburg and Lake Erie Railway run through the city, passed a by-law granting the said company leave to lay its track along the centre of Queen street, in the said city.

After a time, the city, or its aldermen, came to the conclusion that the said track on the centre of Queen street would likely interfere with farm traffic coming into the city along the said street; so a new council at a later date, passed a resolution directing the said company to lay its track, not in the centre of the said street, but on the west side thereof, 9 feet 4 inches distant from the centre, the street being 66 feet wide.

It was alleged, and not denied, at the hearing, that, according to the city by-laws, a space 21 feet wide had to be left on each side of the street for sidewalk, boulevard, curb, and gutter; and the plan approved by order of the Board dated the 15th July, 1907, places the railway track 21 feet 4 inches from the west side of the street, leaving only four inches between the track and the gutter. With such an arrangement, it is manifest that horses with vehicles cannot pass or be tied between the railway track and the west side of the street; and the owner or owners of land on the west side of the street will have no access by vehicles to the front of their property.

Mr. A. K. S. McA. Robertson owns land on the west side of the said Queen street. His land has a frontage of 3,300 odd feet on the street; in fact, it extends nearly the whole distance throughout which the railway is to run on the side of the street, and the only way to make this portion of his property accessible will be for him to add to the street a strip of his own land, 9 feet 4 inches wide, throughout the whole length of his frontage, viz., 3,300 odd feet.

Even if the city should change its by-laws so as to dispense with a boulevard on each side of the street, it would leave only 5 feet for a driveway including the gutter, which every one of any experience knows is not sufficient for the purpose; so it is clear to my mind that Mr. Robertson's property will be materially injured by the running of the railway along the west side of the street in front of his land.

It is true that the property in question is vacant land at the present time; but it is land within the city limits—land which has paid and is paying heavy city taxes; and in case it is decided that it is a fair and reasonable thing to have the railway run so near the said land as to prevent vehicular access to the front thereof, for a distance of 3,300 odd feet, it is morally certain that a great portion of it will *remain* vacant for years to come unless Mr. Robertson is prepared to widen the street at his own expense.

If the Chatham, Wallaceburg and Lake Erie Railway were a street Railway proposing to give to Mr. Robertson and others in the city of Chatham a street railway service and to confer such benefits as usually result from the running of a street railway in a city, I would be disposed to say that the advantage of such a railway beside Mr. Robertson's land might be regarded as offsetting the damage which will result from placing the track so close to his property as to prevent vehicular access to the portion which fronts on the streets; but the said railway is not a *street railway* in the city of Chatham or anywhere else, but a rural electric railway proposing to run once every hour, within certain time limits, for freight and passengers, from Wallaceburg, south, through Chatham, to Lake Erie. It will certainly damage the front of Mr. Robertson's property; and it is doubtful whether it will do much, if anything, to increase the value of land there or anywhere else in the city, beyond what the Grand Trunk and the Canadian Pacific lines have already done.

Why should the corporation of the city of Chatham, for its own benefit, in order to accommodate the traffic which it wishes to have along Queen street, place a private citizen like Mr. Robertson at a disadvantage as compared with citizens on the opposite side of the street. And why should it make it necessary for him to add a portion of his property to the street without allowing him any compensation therefor?

Therefore, I think the order of July 15, 1907, should be confirmed and allowed to stand *only on condition* that Mr. Robertson is allowed reasonable compensation, say, $900 for the strip of his land (9⅓ feet by 3,300 feet), which he will have to add to the street in order to get vehicular access to the front of his property, and thus make it saleable for either residential or business purposes; and as the railway was first located on Queen street by permission of the city, and the location was changed from the centre to the side of the street by the city, and solely for the benefit of the city, the city should pay the said compensation; but the question of payment is one which must be left to the city and the company to settle between themselves.

Ottawa, November 23, 1907.

PRINCIPAL JUDGMENTS DELIVERED BY THE BOARD.

March 31st, 1908, to March 31st, 1909.

Robertson v. Grand Trunk Railway Company of Canada.

This, it will be remembered, was an application to the Board for an order directing the Grand Trunk to issue third-class tickets at the rate of one penny for each mile travelled between Toronto and Montreal; and the Board (6 Can. Ry. Cas. 494) after hearing the application, held that an order should go requiring the company to run every day throughout the length of its line between Montreal and Toronto, at least one train having in it third-class carriages, and forbidding it to charge third-class passenger fares at more than two cents a mile; and directing the company to amend its special tariffs accordingly. The operation of the order, however, was stayed to enable the company to appeal. The Supreme Court of Canada dismissed the appeal with costs (39 S. C. R. 506) 7 Can. Ry. Cas. 267. The railway company carried the case to the Judicial Committee of the Privy Council, which also upheld the judgment of the Board. (1909) O. C. 325; 9 Can. Ry. Cas 149.

Re Interswitching.

In pursuance of the judgment of the Board, as delivered by the late Chief Commissioner (Honourable A. C. Killam), reported in the third report of the Board, pages 140 *et seq.*, 7 Can. Ry. Cas. 302, the report of its Chief Traffic Officer on the subject of interswitching was forwarded to the various complainants and applicants, as well as to the railway companies interested; and after considering the views of the Canadian Freight Association, as contained in a letter from the chairman of the association to the Board, dated May 11, 1908, the order, dated July 8, 1908, issued. (See ante p.) 7 Can. Ry. Cas. 332-335.

Doolittle & Wilcox v Grand Trunk and Canadian Pacific Railway Companies.

This was an application by a number of stone quarry operators, under section 323 of the Railway Act, for an order disallowing the proposed increase in freight rates for the carriage of stone on the railway of the Canadian Pacific and Grand Trunk Railway Companies.

Judgment, July 29, 1908, Chief Commissioner Mabee, 8 Can. Ry. Cas. 8.

This application is made by a number of stone quarry operators for an order, under section 323 of the Railway Act, disallowing the proposed increase in freight rates for the carriage of stone upon the Grand Trunk and Canadian Pacific Railways. The increase was 5c. per ton within certain areas. The case, however, upon the hearing was much enlarged and assumed the feature of not being a serious attack upon the proposed 5c. increase, but rather more a proposition submitted for the establishment of entirely new rates, upon a mileage basis. The applicants represent quarries in operation at some eight points, all within 50 miles of Toronto, the principal market. The applicants are not unanimous in their views; and one of them has communicated to the Board his satisfaction with the 5c. increase, provided the rates are not reduced from individual quarry points.

I do not think the attack upon the 5 cent increase has been successsful. The stone rates to Toronto have always been low; and I am constrained to think that the case would not have been given the attention it has received, had it not been with the hope of persuading the Board to adopt a mileage basis for stone rates.

Now, it is apparent that the quarries located at greater distances from Toronto than the applicants are vitally interested in this matter, as upon this low grade material, with competition keen and prices cut, any disturbance in rates might, and doubtless would, work to the irreparable injury of many interests which have had no notice of this application and no opportunity of being heard. So, had I formed the opinion that it was the duty of the Board to adopt in whole or in part the basis of rates argued for by the applicants, I should have directed these other interests to be notified and given an opportunity to present their views before disturbing the existing order of things. The fundamental ground of the application is to have mileage form the sole basis in making these rates. To those who have not had experience in rate-making the argument that distance must be the principal factor appeals with force; but the history of these cases shows that, while it is of course to be considered, yet in many instances it is a minor matter; and I am not aware that either in England or the United States it has been held by the rate-controlling tribunals that they are bound to regard mileage as the controlling factor. If the argument of Messrs. Doolittle & Wilcox were acceded to, it would have the effect of destroying large industries where proprietors have in good faith invested their money and built up a businesss connection, and turning over to these quarries in the short-haul zone the control of the Toronto market. Of course, no such destruction of capital and consequent hardship upon innocent persons can be permitted, if any other course is open. There are many reported cases in which the Interstate Commerce Commission has paid little or no attention to distance of haul; and the business interests and demands of this country are much the same as there.

The proposal submitted and elaborated in evidence by Mr. Doolittle was ingenious and displayed much industry and care in preparation. The plan suggested was that for the first forty miles the rate be ½-cent per ton per mile plus 25 cents per ton terminal charges; from forty-one to seventy miles, ½-cent per ton per mile plus 20 cents per ton terminal charges; and above seventy miles, ¼-cent per ton is added to the 70-mile rate. Now, the rate of ½-cent per ton per mile for short hauls is admitted by Mr. Doolittle to be the lowest stone rate; and this, applied to the longest haul, is his basis. The objection to his terminal charge is that terminal cost varies; and he provides for this cost only at delivery points and not at the quarries. Now, there is nothing that requires this Board to compel the carriers to frame their rates upon a basis of the kind proposed; and when it appears that the adoption of such a rate basis would work destruction to many existing industries, enure very largely to the benefit of the applicants, or some of them, and probably in no way reduce the price of stone to the consumer—possibly increase it—I am unable to see why the application should succeed. Comparison with rates upon other low-grade commodities was made; but when each instance was investigated, reasons for differences appeared. The reason for low rates upon clay from Waterdown to Hamilton and other points, and upon marl, iron ore, and the like, is that these rates are based upon the reshipment by rail of the finished products of these raw materials. Low coal rates, of course, result from the competition of water carriers.

It strikes me as not unreasonable that the quarry near Toronto should enjoy the benefit of its natural location; but these nearby quarries has submitted for years to the establishment of these artificial rates by the companies, and without complaint have seen their outside competitors invest their capital and develop their industries; and it could hardly be regarded as fair that the short-haul quarry proprietors should, through the instrumentality of this Board, be enabled entirely to destroy their more distant brethren.

The chief traffic officer has made some revision in the scale of rates from some of the shipping points; and, as revised by him, the following will be the shipping points, distances, as follows:—

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From.	Miles.	Rates in cents per ton.
Cooksville	12	45
Georgetown	27	55
Glen Williams	30	55
Milton	30	55
Terra Cotta	33	55
Campbellville	36	55
Cheltenham	35	55
Inglewood	38	55
Dundas	42	55
Schaw	43	55
Credit Forks	43	55
Cataract	46	55
Orangeville	46	55
Guelph	47	55
Alton	49	55
Galt	55	55
Elora	61	55
Fergus	64	55
Shelburne	62	60
Hagersville	67	60
Kirkfield	73	60
Cameron	74	60
Niagara Falls	77	60
Fells	86	60
Burnt River	91	60
Longford	92	60
St Marys	97	60
Owen Sound	119	60
Ivanhoe	120	60
Crookston	133	65

Order, dated July 29, 1908, issued accordingly.

Weganast v. Grand Trunk Railway Company.

Mr. F. W. Weganast of Brampton, Ontario, applied to the Board for an order directing the Grand Trunk Railway Company to issue to him a fifty-five trip ticket for use between Brampton and Toronto, similar to those in use between Oakville and Toronto, at the same rate as those between Toronto and Oakville were sold, namely, $7.15.

It appeared from the evidence that the ordinary train service between the cities of Toronto and Hamilton on account of the frequency and hours of service made it possible for persons living at Oakville to travel daily to and from their business in Toronto. The ordinary train service between Brampton and Toronto, however, originating a long distance from Toronto, left Brampton for Toronto either too early or too late and vice versa to be of any value for persons desiring to live in Brampton and attend to their business in Toronto, although a few persons might do so.

The general agent for the Grand Trunk Railway Company, Mr. G. T. Bell, gave evidence that the number of persons would likely be so limited as to render transportation at commutation rates unprofitable, as has been found in the state of Massachusetts, the most favourably situated in North America for the development of suburban business. One of the railways that had made commutation rates between Boston and the adjoining stations and operated between sixty and seventy suburban trains a day, found that such train service was an actual loss, by reason of the competition of the electric railways on the highways in the vicinity.

Judgment, Chief Commissioner Mabee, concurred in by Mr. Commissioner McLean, November 23rd, 1908. 8 Can. Ry. Cas. 42.

The applicant alleges that he is a resident of the town of Brampton, is a law student attending lectures at Osgoode Hall, Toronto, and travels daily, except Saturdays and Sundays, between Brampton and Toronto, the return fare between which places is $1.10, Brampton being 21·1 miles distant. That between Toronto and Oakville, 21·14 miles from the former city, the railway company issues commutation tickets consisting of 55 coupons good for one trip each way at 13 cents per trip, and also a ticket consisting of ten coupons for $3.25, or 32·5 cents per trip. The applicant claims that the railway company should be required to issue trip tickets good between Toronto and Brampton upon a similar basis.

The application was supported by counsel for the town and Board of Trade of Brampton, and by counsel for the city of Toronto.

The case was based entirely upon the contention that the action of the railway company was an unjust discrimination against Brampton in favour of Oakville.

Section 341 of the Railway Act provides that nothing in the Act shall be construed to prevent the company from issuing 'mileage, excursion or commutation passenger tickets,' so that the company is within its rights in issuing these reduced fare tickets between Toronto and Oakville.

Section 77 of the Act provides that whenever the company charges persons in one district lower tolls than it charges to other persons in another district 'for the same or similar services,' the burden of showing that such difference in treatment does not amount to an undue preference, or an unjust discrimination, shall lie on the company.

Much evidence was given showing the train facilities between Toronto and the towns in question, and the history of the granting of these tickets between Toronto and Oakville. It appears that many years ago reduced rates existed between Toronto and Brampton, but they were abandoned by the railway company upon the complaint of the Brampton merchants, who contended that it took trade from them to the Toronto merchants. The former it was said went so far as to threaten the company that they would divert their traffic from the Grand Trunk Railway Company if these reduced fares were continued.

At the same time similar reduced fares existed between Oakville and Toronto, and no complaints were made by Oakville merchants against the practice. It would therefore seem that the withdrawal of these privileges from Brampton was not brought by the railway company upon its own initiative, but was solely upon account of the situation above indicated.

It was said also that during the experimental stages of the cheap fares between Toronto and Oakville, some persons, in consequence thereof, had purchased houses there, and at the time the rates were withdrawn from Brampton they were allowed to continue between Toronto and Oakville, otherwise these persons might have to sacrifice their property.

In view of these facts, it is clear that the present situation is not brought about by the choice of the railway company; that it is not solely responsible for either the discontinuance of the Brampton rate or the continuance of the Oakville rate, and if there is unjust discrimination against Brampton and in favour of Oakville, the people of the former place can hardly lay the blame upon the company.

Between Toronto and Oakville about twelve persons in the winter and twenty in the summer avail themselves of these reduced fare tickets. There never was any suburban service, and these passengers ride on the regular trains.

Witnesses from Brampton stated that, in their opinion, reduced fares between Toronto and Brampton would have the effect of increasing real estate values there, and persons now residing in Toronto would go there to live. I have no doubt these reduced fares would prove a great convenience to the persons now residing in Brampton, but the point for decision is whether Brampton is 'unjustly discriminated'

against in favour of Oakville. The Act recognizes the right of a railway to discriminate between points, it is only unjust discrimination, or undue preference that the company is required to prove itself free from. There is evidence that no one has chosen to buy property in Oakville who would have purchased in Brampton had reduced fares to that town been in effect. There is evidence that no one has removed from Brampton to Oakville consequent upon reduced fares to that town, and there is evidence that, so far as known, no one has removed from Toronto or elsewhere to Oakville who would have chosen Brampton had reduced fares existed to that town. It may be that Oakville has to a small extent profited by these reduced fares; it may be that Brampton would profit to an equal or greater degree if they were in force between Toronto and that town; but the question is whether Oakville has profited at the expense of Brampton, and I am of opinion that such has been shown not to be the case.

Counsel for the town of Brampton asked that these tickets between Toronto and Oakville be prohibited unless the like privileges were granted to Brampton; but I am of opinion that inasmuch as it has been shown that Brampton has not been injured, it would not be fair to the people of Oakville to make such an order.

The application must be refused.

Judgment, in dissent, Mr. Commissioner Mills, December 24, 1908, 8 Can. Ry. Cas, 168:—

The Grand Trunk Railway Company admits that it has been and is now discriminating against the town of Brampton as compared with the town of Oakville in the matter of commutation tickets.

Discrimination in tolls, or rates, against any person, commodity, or locality, is prima facie unjust, and should be disallowed by the Board of Railway Commissioners, unless facts are stated and reasons given which are sufficient to prove that, under the special circumstances and conditions of any case in question, the difference in treatment 'does not amount to an undue preference or an unjust discrimination' (Railway Act, section 77).

In every case of a lower toll given to one person, commodity, or locality than is given to another person, commodity, or locality, 'under substantially similar circumstances and conditions,' 'the burden of proving that such lower toll or difference in treatment does not amount to an undue preference or unjust discrimination, shall lie on the company' (Railway Act, section 77).

A great deal of so-called evidence was given in this case, but very little of it bore even remotely upon the point at issue, viz., whether or not the admitted discrimination against Brampton as compared with Oakville in the matter of commutation tickets is just and reasonable. The railway company made an effort to justify the discrimination; but its failure to do so was, in my opinion, most signal and complete. The only witness called for the defence was Mr. G. T. Bell, general passenger and ticket agent of the company.

Mr. Bell went at length into an explanation of the reasons why the company had issued commutation tickets to Brampton and other places for a number of years, and why it had ceased to do so, especially in the case of Brampton.

Mr. M. K. Cowan, counsel for the railway company, stated that the commutation tickets were withdrawn from Brampton, because 'they had not been taken advantage of'; and Mr. Bell testified that they were withdrawn on account of a demand, backed by a threat, from the business men of the town, because so many Brampton people were availing themselves of the commutation tickets to purchase goods in Toronto. Note Mr. Bell's evidence on this point. Question by Mr. Fullerton: 'When you were giving commutation tickets to Brampton, the traffic got so large that it alarmed the Brampton merchants, and they, as you said, put a pistol to your head?' Answer by Mr. Bell: 'It got enough for them to get excited'; but, he adds, 'it was not the class of traffic the rate was put in to cultivate. It was people doing business and living in Brampton, and coming in daily to the city.' Further—question by Mr. Cowan: 'Is it

possible to bring up a suburban service between here and Brampton by commutation tickets?' Answer by Mr. Bell: 'I cannot believe it possible in the conditions existing.' Thus the company is represented as withdrawing the commutation tickets from Brampton at the direction of the business men of the town because so many people were going 'daily to the city,' and at the same time justifying the withdrawal on the ground that it was then and is now impossible to develop a reasonably profitable suburban traffic between the town and the city,—traffic of the kind which the company desires; but no evidence is given to prove that the admitted discrimination against Brampton is not unjust or unreasonable.

Mr. Bell stated that, after making an experiment with commutation tickets, the company had withdrawn them from certain places, including Brampton, and had decided to continue them at Oakville, because 'some people in Oakville, during this experimental stage, had bought homes in the country, that they might have to sacrifice if the cheap rates were withdrawn'; but farther on, he stated that he could not tell how many people living at Oakville were doing business in Toronto when the company decided to continue the tickets to Oakville and withdraw them from Brampton. He was, he said, 'just stating the general principal'; but he gave no evidence as to how many then had or now have vested interests in Oakville, neither the number of the people nor the extent of their interests; nor any evidence as to the amount of property which might be sacrificed, especially in view of the fact that there is now an electric line between Oakville and Toronto; nor anything which could be called evidence as to whether or not there were and are similar vested interests in Brampton, from which town there is no competing electric line to Toronto.

The population of Brampton is nearly double that of Oakville; the two towns are practically the same distance from Toronto; Mr. Bell's evidence proves that there was a very considerable amount—to the merchants of Brampton, an alarming amount —of daily traffic between Toronto and Brampton when the commutation tickets were withdrawn; and the evidence of other witnesses examined at the hearing, tends to show, without actually proving, that, with commutation tickets such as those sold to the people of Oakville, the suburban traffic on the Grand Trunk Railway between Oakville and Toronto.

I would not at present be disposed to order the issue of any class of tickets which would reduce the revenue of the company; but it was not urged that commutation tickets such as those asked for by Brampton would result in a reduction of revenue. The regular return trip ticket from Brampton to Toronto costs $1.10; and a 55-trip commutation ticket, good for one month, costs $7.15. The former is purchased only by people who must, or think they must, travel; and the latter (the cheaper ticket) appeals, not only to those who must do a certain amount of travelling, but also to the much larger number of people who need not travel, but will do so for a consideration—an inducement offered in the way of rate reduction, combined with the possibility of a greater variety of goods and better bargains in buying and selling; but no one can avail himself of the benefit, or supposed benefit, of the cheaper ticket until he has paid the company $7.15, which is sure income to the company whether the purchaser makes the whole or only a small proportion of the trips within the month covered by the ticket; and so on for each succeeding month. Hence it seems almost certain that the use of commutation tickets such as the above, on ordinary trains, without any additional expense for equipment or service, would pay the company better than the use of the ordinary return-trip ticket; and I think this is true wherever the traffic may be—from surrounding towns and villages to Montreal, Quebec, Toronto, Hamilton, London, Ottawa, Kingston, or any other important business centre. I express no opinion as to whether the issue of commutation tickets, under approved conditions, would benefit the country as a whole, but I am satisfied that it would increase the revenue of the railway companies.

In his evidence regarding the withdrawal of commutation tickets from certain places, Mr. Bell said: 'We took the view that it was right to continue to use commu-

tation rates where the ordinary train service made it possible for people to live in the country and come into the city and do their business and go back at reasonable rates.' Now, this is precisely the condition of things at Brampton. It was clearly proved at the hearing that the present train service on the Grand Trunk at Brampton is adequate, satisfactory, quite equal to that furnished at Oakville; and the council and Board of Trade of Brampton specifically stated that their application was for commutation tickets to be used on the ordinary trains running between Toronto and Brampton—that and nothing more; so, on Mr. Bell's own evidence, it would appear that Brampton should have commutation tickets.

Hence, to sum up, I would say that, as I understand the case, the facts are as follows:—

(1) Complaint was made to the Board by the applicant and other interested parties, alleging that the Grand Trunk Railway Company was discriminating in tolls, or fares, against the town of Brampton as compared with the town of Oakville.

(2) At the hearing of the complaint, the railway company admitted that it was discriminating against the town of Brampton, but not unjustly so—maintaining that the discrimination complained of and admitted was just, fair and reasonable.

(3) The said railway company completely failed to justify the said discrimination —not having given any evidence which, by the utmost stretch of imagination, could be said to prove that the difference in treatment of the town of Brampton as compared with the town of Oakville, is either just, fair or reasonable.

Therefore, my judgment is that the Board is under obligation to take such action as may be necessary to remove the discrimination, either by ordering the restoration of commutation tickets to the town of Brampton, or by simply directing the railway company to cease and desist from further discrimination against the said town as compared with the town of Oakville in the matter of commutation tickets.

Order dismissing the application issued December 28, 1908.

On February 6, 1909, the applicant applied for a re-hearing. This application also refused on the ground that the Board could not see that any benefit would be gained by opening up the case.

Crowsnest Pass Co. v. Canadian Railway Co.

This was an application by the coal company for an order directing the Canadian Pacific Railway Company to provide a special tariff of tolls to be charged by the railway company to the coal company, under the provisions of the agreement between the British Columbia Southern Railway Company, the Canadian Pacific Railway Company and the Canada Coal Company, Limited (now the Crowsnest Pass Coal Company), bearing date July 30, 1897; and to refund to the applicant all charges in excess of such reduced rates collected by the railway company.

The facts of the case are fully set out in the judgment of the Chief Commissioner.

November 23, 1908.—Chief Commissioner Mabee, 8 Can. Ry. Cas. 33; The applicant asks for an order that the railway company do file a tariff from all points on the property of the applicant company, viz., Michel, Fernie, Coal Creek, Morrissey Junction and Carbonado, and hereafter to all other points at which collieries may be established by the applicant company for all 'plant,' as defined by an agreement of February 19, 1906, which the applicant company may ship over the lines of the respondent, required by the applicant for the construction and operation of their works, such tariff to be not more than six-tenths of the present tariff rates on such materials for carload or less than carload, and to refund to the applicant company all excesses which the respondent has charged the applicant on such plant since May 1, 1907, and generally to file tariffs in compliance with the provisions of paragraph 14 of an agreement of July 30, 1897.

On the last mentioned date a lengthy and somewhat complicated agreement was entered into, to which the British Columbia Southern Railway Company, the respondent, and the Kootenay Coal Company were parties, the applicant company being formerly the Kootenay Coal Company and admittedly entitled to the benefits of the agreement.

Paragraph 14, under which relief is sought, is as follows:—

'The construction materials required by the coal company to be used in the construction of permanent works, and for timber used in its said mines, and carried by the Pacific company to the coal company's said mines from points on the line of the Pacific company's said railway, the coal company will be charged by the Pacific company for the carriage of all such materials no more than the rate of one cent per ton of 2,000 pounds per mile, such construction material to include rails, fastenings, ties, bridge timber, and lumber required by the coal company, provided that such material may be carried a distance of not less than 100 miles on the Pacific company's railway, and that for all plant shipped by the coal company over the lines of the Pacific company, and required by the coal company for the construction and operation of the said works, the coal company shall be charged by the Pacific company at the rate of not more than six-tenths of the ordinary tariff rates on such materials for carload or for less than carload.'

When this agreement was entered into the works of the coal company had not been established, and the respondent had no line of railway in the locality where it was the intention of the coal company to locate what has since become an industry of very large proportions and in which upwards of $5,000,000 have been invested.

Nothing turns upon the portion of the above paragraph concerning the carriage of materials at one cent per ton per mile, and it was stated that the regular tariff rate of respondent upon such material was less than the amount agreed upon, and the applicant was charged upon such material at the tariff rate.

On February 19, 1906, an agreement was entered into by the parties to this contest under which the following articles were considered as 'plant' under the above clause 14:—

Asbestos.

Babbit metal.

Brattice cloth.

Bridge on Tipple material and machinery, including conveyors, link belt or other transmission machinery, screens, picking tables, dumps, car hauls and parts thereof.

Castings, iron, steel or brass.

Chain iron or steel.

Electrical machinery and parts, including generators, dynamos, motors, lamps, globes, sockets, wire, insulators and transformers.

Engines, stationary, including boilers, condensers, compressors, box car loaders, air receivers, hoists and parts thereof.

Fire engines and apparatus.

Harness and saddlery.

Horses.

Hose, water and steam.

Iron bolts, nuts, rivets and washers.

Iron, bar and other iron and steel.

Locomotives, steam, air or electric (used in and about the mines.)

Machinery and parts thereof, including blocks, pulleys, shafting, coal and rock drills.

Mine cars and parts, including trucks, irons and wheels.

Machine shop material.

Machine shop machinery and parts thereof.

Machinery packing.

Mules.

Nails and spikes used in mine structures.

Pipe, lead, vitrified, soil, wood, including fittings, injectors, lubricators and valves.

Pumps and parts thereof.

Rails, fastenings, and switch material used in and about the mines, not over 45 lbs. weight per yard.

Rope, all kinds.

Safety lamps and parts.

Scales and parts.

Tools, including files, saws, coke forks, wheelbarrows, axes, shovels, spades, picks, handles, lanterns, globes, grindstone, wrenches, anvils, bellows, dirt scrapers, machinists' and machine shop tools.

Wire, plain.

Vehicles and parts, including wagons and sleighs.

The agreement of July 30, 1897, was entered into in good faith, and has been carried out by the parties, except as to the matter which gives rise to this application. Many covenants were entered into by the parties to that agreement, and one result of it was that the respondent company obtained the conveyance of a very large area of coal lands, estimated by a witness at the hearing as being worth many millions of dollars, but in the view I take of this application it is neither needful nor desirable that close or accurate attention be paid to the consideration received by the respondent company for entering into the covenants embraced in this agreement, one of which was the one in contest.

The respondent agreed to construct a line of railway; this was done. The applicant agreed that this large area of coal lands should become vested in the railway company, and this covenant was fulfilled. All other covenants contained in the agreement were carried out, except that the railway company says that the provisions of the Railway Act prevent its carrying over its lines plant shipped by the applicant company for the construction and operation of its works at six-tenths of its ordinary tariff rates, and that such an agreement was and is illegal.

It was stated that when the agreement was originally entered into there was no demand in that locality for the class of articles the railway company was agreeing to carry at reduced rates; that there were no industries in existence, and, therefore, no persons against whom the six-tenths clause of the agreement would be a discrimination, and that, therefore, the agreement was valid when entered into. Be this as it may, it, I think, is not necessary to decide whether the agreement was opposed to the Railway Act of 1888, and the only point for decision here is whether the application can succeed in view of the provisions of the Railway Act now in force; and I am of the opinion that the fairer position to leave the parties in is to deal with the situation upon the footing of the present legislation, leaving the applicant to take such other proceedings as it may be advised with respect to the consideration alleged to have been given for the covenant of the railway company for this reduced freight rate, if such course is open to it.

Admitting the jurisdiction of this Board to make an order of the kind asked for, as to which I have grave doubt, although jurisdiction was not disputed by the railway company, I do not think the application can succeed.

It is admitted that at the present time large development has taken place in the portion of British Columbia to which this agreement applies, and there are many persons, firms, and corporations requiring carriage by the railway company of the class of articles and material as defined by the agreement of February 19, 1906, into that district, and into the towns mentioned in the prayer of the petition, there are other coal companies within varying distances, some within one hundred miles of the applicant's coal area and plant, requiring similar articles and material, and the success

of this application would mean that the applicant would pay but six-tenths of the regular tolls charged to others upon all the various materials mentioned in the agreement of February 19, 1906, and this for all time to come, so that in future years if the railway company reduced its rates upon these articles, or any of them, or were so required by the Board, the tolls to be paid by the applicants would continue to be but six-tenths of such reduced rates, and so discrimination in its favour would continue for all time. I think such a condition is opposed to the spirit as well as the express provisions of the Railway Act.

Mr. Marsh argued with much force that all this was quite permissible, as the applicant had paid an adequate consideration for the favoured treatment, and he cited some English and American cases that go to support that contention. I have gone through most of these, and while some can be distinguished, both as to the facts and the terms of the various statutes upon which they were decided, it is sufficient to say that the same are not binding upon this Board, and no such principle has as yet been introduced into the railway jurisprudence of Canada, and it has been dissented from in other cases both in England and the United States. It is impossible to find as a fact that the consideration passing from the coal company to the railway company was 'adequate.' It is contended this consideration requires the railway company to carry at these reduced tolls for all time. Who can say what the actual sum was that was paid? The area of coal lands so conveyed are undeveloped, and their value is based upon opinion evidence only. Who can say how much material is to be carried by the railway company for the coal company, and what the length of time that such carriage is to continue? Who can say to what extent the tolls upon these articles may be reduced in future years by reason of competition or otherwise? All these are matters upon which reasonably accurate information must be had before it could be said that the coal company had paid to the railway company a consideration that could fairly be said to make up the other four-tenths of the tolls, thereby eliminating the discriminatory feature of the agreement.

In this case no finding could be made that the consideration was 'adequate'; but if the contrary was the case, I would not follow the cases cited for the proposition that under our law any such agreement can be made.

The Railway Act requires that under substantially similar conditions the tolls charged shall be equal to all persons, and at the same rate, whether by weight, mileage, or otherwise, and any reduction or advance either directly or indirectly, is expressly prohibited. No undue or unreasonable preference or advantage can be permitted to any person or company. The object of the legislation is to place every one upon terms of absolute equality, and if agreements were permitted to be entered into for reduction in tolls or for other preferential treatment, the door would be opened wide for the defeat of the Act, and the Board would be called upon to struggle with all sorts of conditions, opinions, and complications in the determination of such cases.

It will not be understood that I am expressing the opinion that such was the object of the present agreement, the conditions existing when the same was entered into were such that the contrary opinion might be arrived at.

I think the application must be refused.

Order, dated 20th November, 1908, dismissing the application, issued accordingly.

Laidlaw Lumber Company v. Grand Trunk Railway Company.

The R. Laidlaw Lumber Company, Limited, of Toronto, applied to the Board for an order directing that the order of the Board No. 4988, dated July 8, 1908 (the general interswitching order), be made retroactive, so as to apply to all cars loaded with lumber received over the line of the Grand Trunk Railway Company from February, 1907, until the interswitching arrangements prescribed by the Board in the said order become effective on the 1st September, 1908; and switched by the Canadian Pacific

Railway Company to the applicant's siding at Dundas street; and also that the Grand Trunk be required to refund certain switching charges collected by that company prior to the said 1st day of September, 1908.

Counsel for the applicant contended at the hearing that the general interswitching order of July 8, 1908, was declaratory and related back to the time at which the complaint was filed—the original application was filed in April, 1907—that the charges paid by applicant were paid under protest and should be refunded; and that the railway company had no lawful right to collect the tolls at all except under an order of the Board.

Judgment of Mr. Commissioner McLean, concurred in by Chief Commissioner Mabee, December 1, 1908 (8 Can. Ry. Cas., 192):—The decision of the Board in this case must be governed by the decision of the Joint Switching Rates Case (Case No. 182); Canadian Manufacturers' Association v. Canadian Freight Association, 7 Can. Ry. Cas., 302.

While the question of interswitching was dealt with in the London Case; Grand Trunk Ry. Co. v. Canadian Pacific Ry. Co., and city of London, 6 Can. Ry. Cas., 327, the Board was careful to limit itself to the mere facts of the particular case before it. For it refused to deal in a general way with the question of the division of interswitching rates in reference to all the points in Canada where the railways of the two companies concerned connected.

It is admitted in case 182 that it had, for a considerable period, been the practice of the railways in Toronto to absorb the interswitching charges. In the hearing at Toronto it was suggested that the applicant company had furnished antecedent consideration for the continuation of the practice of absorption. This was, however, by the way and not material. In addition, the late Chief Commissioner held that the existence of such practice of absorption for a period of time did not preclude railways changing the practice. Canadian Manufacturers' Association v. Canadian Freight Association, *et supra,* 308.

In the absence of a joint tariff, including the switching charges, it was open to the railway to charge its standard tariff, and in addition thereto switching rates. Ibid., 306, 308.

While a comparatively sudden change from the practice of absorption of the switching charges to a practice of charging the shippers for the switching services, may have been arbitrary, the railway was within its legal right in so acting.

It is alleged that the interswitching tariff of the Grand Trunk, effective March 1, 1907, was simply a tariff as between the railways and not having been properly filed was illegal. While it was advisable that switching tariffs should be filed with the Board, the non-filing of such tariffs was not illegal prior to the issue of the order of July 8, 1908, by the Board; *Ibid.,* 308.

While the Board may require the two railway companies to treat traffic involving interswitching as joint traffic, it was not illegal, in the absence of the filing of a joint tariff, covering switching services, for the railway to charge an additional sum for its switching services which are something distinct from the ordinary work of transportation, although such switching charges might not have been filed. The argument then from the switching tariff, as between the railways themselves, fails.

Under an order of the Board of July 8, 1908, effective September 1, 1908, there were established regulations in regard to the switching charges on traffic, both competitive and non-competitive. The applicant claims that in so far as the interswitching rates charged by the railways were in excess of those established by the order of the Board, there should be a refund. The first portion of the complaint of the applicant, namely, that dealing with the conditions under the tariff, effective March 1, 1907, has already been dealt with. There is no complaint that the Grand Trunk tariff, effective June 5, 1907, was not properly filed, or that it did not properly notify the public. While the subsequent order of the board did reduce the switching rates

on non-competitive traffic, the Board has no power to make a retroactive alteration in a tariff, which is not contrary to any of the provisions of the Railway Act, so as to apply the alteration to past transactions; Dominion Concrete Company vs. Canadian Pacific Railway Co., 6 Can. Ry. Cas., 514.

It is clear that the law in regard to interswitching had been in an inchoate condition. The order of July 8, 1908, was the outcome of a series of investigations and reports which dates as far back as 1904. In view of this and of the established policy of the Board in regard to refunds, it is impossible to grant any such retroactive order as is asked for, and the complaint of the applicant should, therefore, be dismissed.

Order, dated January 8, 1909, dismissing the application accordingly.

NOTE.—Upon application to the Board leave was granted to appeal to the Supreme Court of Canada on January 28, 1909.

Algoma Central and Hudson Bay Railway Co. v. Grand Trunk Railway Co.

This is an application by the Algoma Central and Hudson Bay Railway Company for an order directing the Grand Trunk Railway Company to make a joint tariff with them.

The steamers of the applicant railway wished to obtain a joint tariff with the Grand Trunk, so as to compete for traffic from points in Ontario reached by the lines of the Grand Trunk and carry such traffic from lake ports by their steamers to ports in Northern Ontario and vice versa, reached by their steamboat and railway. The Grand Trunk Railway Company has now a similar joint tariff arrangement with the Northern Navigation Company.

Judgment, Mr. Commissioner McLean, November 23, 1908, 8 Can. Ry. Cas. 46:—This is an application by the Algoma Central and Hudson Bay Railway Company for an order, under sections 7, 317, 333, 334 and 338 of the Railway Act, for a joint tariff with the Grand Trunk Railway Company.

In the earlier case of the Algoma Central and Hudson Bay Railway Company v. the Grand Trunk Railway Company, in which application was made on behalf of the steamboats of the Algoma Central and Hudson Bay Railway Company to obtain a joint tariff with the Grand Trunk, the application was refused, it being held that 'in terms of sections 266 and 267 of the Railway Act of 1903 a line of steamships operated by a railway company running to ports reached by the line or lines of another railway did not constitute a continuous route within the meaning of sections 266 and 267 of the Railway Act of 1903.

Algoma Central and Hudson Bay Railway Company v. Grand Trunk Railway Company, 5 Can. Ry. Cas. 196.

The applicant company relied upon section 276 of the Railway Act, 1903, as making the provisions of sections 266 and 267 extend to the traffic mentioned.

In the present application the legality of a continuous route composed by the use of vessel and rail is not involved, since this point is now covered by the Railway Act. In respect of the present application, it is to be noted that the jurisdiction conferred under sections 333 and 334 of the Railway Act in regard to through or joint rates is based on section 25 of the English Railway and Canal Traffic Act of 1888. This section is an expansion of the 'reasonable facilities' clause of the Act of 1854. Under this clause the Court of Common Pleas decided so early as 1857 that in order to grant through booking, public convenience must be made out; Barret v. Great Northern and Midland Railway Companies. 1 Ry. & C. Tr. Cas., 38.

The principles involved in the English Act of 1888 are the same as those in the Canadian Act, although the means whereby the through rate may be obtained differ.

Section 25 of the Act of 1888 provides inter alia that the 'facilities' shall include 'the due and reasonable receiving, forwarding and delivery..... at through rates, tolls or fares.'

Subsection 5. 'If an objection be made to the granting of the rate or to the route the Commissioners shall consider whether the granting of the rate is a due and reasonable facility in the interest of the public, and whether . . the route proposed is a reasonable one . . . '

The policy of the English Railway and Canal Commission is indicated by the following citations:—

Reasonableness of the through rate and the interest of the public are the tests by which the demand must be tried.

Didcot, Newbury and Southampton Railway Company v. London and Southwestern Railway Company *et al,* 10 Ry. & C. Tr. Cas. 9, pp. 15, 17.

' It was not the intention of parliament, nor has it been the practice of the court to encourage applications for through rates, the only effect of which would be to transfer traffic from one route to another, or to reduce reasonable rates.'

Ib. per Lord Cobham, 25.

A through rate was refused because not a facility in the interests of the public.

Swindon, Marlborough and Andover Railway Company v. Great Western and London and Southwestern Railway Companies, 4 Ry. & C. Tr. Cas. 349, p. 350.

" . . . however desirable a reduced rate may be in the interests of the public, it is always necessary to see whether there is a commensurate advantage to the railway company who may be forced by the decision of the Commissioners to accept a lower scale of charge than that which it is actually making and to which it is entitled.'

Per Collins, J., in Plymouth Chamber of Commerce v. Great Western and London and South Western Ry. Cos., 9 Ry. and C. Tr., Cas. 72.

" . . . I for one should be inclined, in a case of this sort, to take very seriously into consideration, on the question of public interest, the fact that two competitive routes must tend to make either company more likely to give reasonable concessions to traders.'

Plymouth, Devonport and Southwestern Junction Railway Company v. Great Western Railway Company *et al,* 10 Ry. & C. Tr. Cas. 68.

While the jurisdiction of the Interstate Commerce Commission of the United States differs in various respects from that of the Canadian Boards, the similarity of some of the problems to be dealt with make the findings of the former body of interest. The Interstate Commerce Commission has passed on the question of joint or through rates in Loup Creek Colliery v. Virginian and Chesapeake and Ohio Railway Companies, 12 I.C.C.C. Rep. 471.

In this case Commissioner Clements said: 'Joint rates are only empowered with the manifest intent of giving effect to the general purposes of the Act to regulate commerce by securing reasonable facilities to the public and by preventing unreasonable and unjust rates, facilities and discriminations. P. 477. It has also been held that there should be considered the adequacy of the existing shipping arrangements. Relief to shipping communities, not aid to carriers in obtaining strategic advantages in their contests with one another is what is to be considered.

Chicago and Milwaukee Electric Ry. Co. v. Illinois Central Ry. Co., 13 I.C.C. Rep. 20.

It is well established that the public interest and the question of the reasonableness or otherwise of the existing rate arrangements are the vital points in any application for through rates.

I am of opinion:—

(1) That the Algoma Central has not proved that there is a public interest involved, or

(2) That the existing rate arrangement is unreasonable.

Chief Commissioner MABEE.—I agree.

November 24, 1908. Mr. Commissioner Mills.—The serious thing to my mind is that, with the present local rates on the Grand Trunk (so much higher than those charged to the Northern Navigation Company) the applicant company is prohibited from carrying its own supplies and its own manufactured goods in its own boats, and it should not be overlooked that the Northern Navigation Company now finds it necessary to increase the number of its boats in order to accommodate the traffic via the Grand Trunk.

Order dismissing application issued December 12, 1908.

Cartier Stop-over Case.

The Transportation Bureau of the Montreal Board of Trade complained against an additonal charge of one cent per one hundred pounds imposed by the Canadian Pacific Railway Company at Cartier, Ont., on western grain and grain products, in carloads, consigned to Cartier, 'For orders.'

The matter was heard at the sittings of the Board held in the city of Montreal, at which counsel for the complainants, the railway company, the Dominion Millers' Association, and the Canadian Manufacturers' Association were present, and evidence was offered.

The judgment of the Board was delivered by Assistant Chief Commissioner Scott.

Judgment, January 2, 1909:—

The Transportation Bureau of the Montreal Board of Trade complain against the additional charge of one cent per hundred pounds imposed by the Canadian Pacific Railway Company at Cartier, Ontario, on western grain and grain products, in carloads consigned to Cartier, 'for orders,' under supplement No. 13, effective September 1, 1908, to the company's tariff C. R. C. No. E, 678, and still in force by supplement No. 15 to the same tariff.

It has been the custom for many years, for the railway company to permit grain shippers sending cars from Fort William east, to have the cars billed to some point on the line of railway, formerly North Bay (now Cartier) 'for orders.' Upon arriving at the stop-over point the car is then held, subject to further instructions from the consignee as to the point of destination. The privilege is, undoubtedly, of substantial value, as the shipper in this way is enabled to get his grain some 500 miles nearer its destination without having to name it at the time of shipment.

As the through rate is charged for transportation to the final destination, the company only makes the stop-over charge to pay itself for the services rendered at Cartier. If the consignee's instructions have not been received at Cartier prior to the arrival of the train containing his car to be re-directed, it is placed on a siding and is held by the railway company until his instructions are received. The railway company must, of course, break its train and perform a special shunt if the car is to be put on the siding for orders. As this is a substantial service, I think the railway company is entitled to a fair remuneration.

At present the railway company is charging for this additional service one cent per hundred pounds, so that the charge per car may vary from four to eight dollars. I think the minimum $4 is too high a charge for the service rendered.

I, therefore, am of the opinion that the present tariff should be disallowed, but I would approve of a tariff containing a charge of one dollar per car for each day of twenty-four hours or fraction thereof, for stop-over 'for orders' privileges. In fixing this amount, I have taken as a fair basis of value the dollar charge per car per day which has been established as a fair allowance for the use of a car standing on the track in the 'Canadian Car Service Rules.'

I would not differentiate between the case, where the instructions for reshipment arrive at Cartier before the car, and the case where the car arrived before the instructions, although the service rendered by the railway company in the second case would

be more than in the first; because, if the question as to which arrived first at Cartier became an important element in determining the charges, there would, undoubtedly, be confusion and friction between the shipper and the railway company. As pointed out by the chief traffic officer of the Board, it would be fair to set off the advantages to the railway company in the first case against the extra service in the second case, and merely allow the standard charge of one dollar per car for twenty-four hours in all cases.

When we had the Cartier stop-over question before us at the Montreal sittings, we were not given any evidence with reference to the Fullerton Lumber Company complaint against the Grand Trunk for stop-over charges at Sarnia tunnel. If the principle involved in the Sarnia case is similar to the Cartier case, then this judgment will also apply to the Sarnia case.

Order, dated the 21st January, 1909, issued, directing that the charge of one cent per 100 pounds imposed by the Canadian Pacific Railway Company at Cartier, Ontario, on western grain and grain products in carloads, consigned to Cartier 'for orders' under supplement No. 13, effective September 1, 1908, to the company's tariff C. R. C. No. E. 678, and still in force by supplement No. 15 to the same tariff; and by the Grand Trunk Railway Company at Sarnia tunnel, or grain and grain products, in carloads, originating in western Canada, destined to points in eastern Canada, and routed via Chicago, Chicago junctions, or Milwaukee to Sarnia tunnel, Ontario, 'for orders,' under supplement No. 3 to the company's tariff C. R. C. No. E. 1101, be disallowed, and a 'stop-over' charge of twenty-five (25) cents per car a day for the first forty-eight hours, and the car service toll thereafter, substituted therefor.

Provision was also made that the order become effective not later than the 15th February, 1909.

Re Complaint Wallaceburg Sugar Company, Limited, of Wallaceburg, Ontario.

This was an application by the Wallaceburg Sugar Company for an order establishing what is generally known as an average demurrage plan. The facts are contained in the judgment of the Assistant Chief Commissioner.

Judgment, Assistant Chief Commissioner Scott, February 4, 1909, concurred by by Chief Commissioner Mabee, 8 Can. Ry. Cas., 332:—

The average demurrage plan, which the applicant seeks to have established, may be described as the giving of credit of free time by a railway company for use of a freight car to a consignee, when the amount of time he takes to unload the car is less than the amount of time allowed to do so by the car service rules; which credit, or spare time, is set off against excess time, for the use of other cars for which the railway company now charge the consignee demurrage.

At the hearing of this case, it was urged by the applicant that as the average system existed in the state of Michigan where some of its competitors were, that it should be adopted in Canada, at least in so far as the sugar refiners were concerned. It was also stated that the Michigan refiners were able to purchase their raw material in Canada, but the Canadian refiners were denied the privilege of purchasing in Michigan; that the American manufacturer was protected by a duty of $1.77 per hundred pounds, while the protection granted the Canadian manufacturer was but 83 cents, and that therefore some special consideration should be granted the applicant. I cannot see how the fairness or the justice of the system upon which charges for car service in Canada are made, is affected by these conditions which surround the sugar refiners of this country or why, because such conditions exist, a radical change in the system should be made.

Mr. Gordon, the general manager of the Wallaceburg Company, told us that while they can regulate the number of cars of beets ordered per day from the farmers, they cannot control the numbers of cars per day which the railway companies may

deliver, and that as a result they are sometimes 'swamped.' He said that on an average, they unloaded 22 cars per day during the past year, but have unloaded as many as 90 cars in a day. About 60 per cent of the beets consumed at the refinery are hauled by rail; the haulage of the other 40 per cent being equally divided between water transports and teams.

That the company is capable of handling a fair number of cars within the time allotted by the Canadian car service rules, is quite apparent from the statement submitted with its application, dated November 11, 1908. It shows that during a certain period 1,051 cars were unloaded, and that the average time per car was 31½ hours. Of this number of cars, 855 were not held longer than the 48 hours free time allowed for unloading under car service rules. This proves that, under ordinary circumstances, 48 hours is sufficient time to be allowed for unloading a car of beets.

If special circumstances occur, for which the consignee is not responsible, which prevents him from unloading the cars delivered within the allowed free time, the car service rules provide that demurrage shall not be charged for necessary additional time. For instance, allowance of extra time is made when cars are tendered to the consignee under conditions for which the railway company is responsible in numbers beyond his ascertained reasonable ability to unload, or where the weather is inclement and unsuitable for unloading. These rules are interpreted, not by the railway company interested, but by the Canadian car service bureau, whose manager, Mr. Duval, stated under oath that the rules are interpreted most liberally to the consignee, and that the object of the bureau was to secure the quick release of cars, rather than the collection of demurrage for the railways.

This can be well understood even from the railway point of view, because while the car is held the company can only get $1 per day for it, whereas the earning capacity of a freight car in service is about three times that amount.

The average system suggested, in my opinion is not justifiable under the contractual relations which exist between the consignor or consignee (as the case may be) and the railway company. The contract or carriage is, that the railway company will carry goods to the point where they are to be delivered to the consignee, who in turn is to unload and release the car with all reasonable despatch. For more certainty and uniformity of practice, rules have been adopted, which say in effect that, 'reasonable despatch' for unloading shall not, in the case under consideration, exceed 48 hours. If a man exceeds this reasonable time in unloading, he is penalized by a charge of $1 per day for the extra time he may hold the car. Such a provision is in the public interest, because it makes a consignee prompt in releasing cars consigned to him and thus increases the supply of available cars for the shipping public.

In my opinion, the average system might have the effect of making a consignee dilatory about unloading so long as he had free time to his credit, and if he had not free time to his credit the circumstances would be the same as they are under the present rules.

The Canadian Car Service Rules have only been in force since March 1, 1906, and it has taken some time to get the public to understand them. They may be defective in some details and require to be amended, but I think they are founded on sound principles which should not be departed from.

The uncontradicted evidence of Mr. Duval, of the Car Service Bureau, to the effect that cars are being released more quickly by consignees under these rules than was done formerly, proves that the desired result is being accomplished.

The intention is that, under the Car Service Rules, each car shall be dealt with by itself and without reference to the movements of other cars. This insures equal treatment of the smaller shipper or consignee with the larger one. But, if the average plan were in force, I can well see that an injustice would be done the smaller dealer by giving an advantage or preference to the dealer who had a large number of cars to unload. Suppose, a dealer with a large capacity for storage, received fifty

cars of merchandise, which under the rules he had two days to unload, and unloaded them all the first day. He would then have fifty days to his credit. The next day, he and a small competitor each received one car. The small competitor would have to unload in two days or be penalized, while the other could hold his car for fifty days free time, which might prove to be of very material advantage. It may be said that this is an extreme case. It doubtless is, but it shows how the average demurrage plan might work out unless there were limitations upon it. Mr. Gordon suggested, that the plan might be adopted for those in his line of business only. I do not think it would be advisable at this early date to start making exceptions to the general principles laid down in the Car Service Order, which has not yet been in effect for three years. These principles are, in my opinion sound, and should not be interfered with.

If the applicant cannot get redress under the rules from the Car Service Bureau, he may apply to this Board and his complaint will be heard. I am, therefore, of opinion that this application should be dismissed.

Order, dated February 8, 1909, dismissing application, issued.

The Anchor Elevator and Warhousing Company, Limited, and The Northern Elevator Company, Limited, v. the Canadian Pacific Railway Company.

The Anchor Elevator and Warehousing Company, Limited, and the Northern Elevator Company, Limited, both of Winnipeg, complained against the excessive charges made by the Canadian Pacific Railway Company for switching 'in transitu' grain from the St. Boniface transfer track to the complaints' elevators on the line of the Canadian Pacific Railway Company at Winnipeg and return to the same transfer track for redelivery to the Canadian Northern Railway Company.

The complaint was heard at the sittings of the Board held in Winnipeg, February 6, 1909.

The facts are fully set forth in the judgment of the Chief Commissioner.

Judgment, Chief Commissioner Mabee, March 31, 1909. (9 Can. Ray. Cas. 175.)

The elevators of the applicants are located upon the lines of the Canadian Pacific Railway Company at Winnipeg, and their complaints allege excessive charges made by that company for switching services rendered to the Canadian Northern Railway Company for the movement of cars arriving by the latter line at the St. Boniface transfer track, to the applicants' elevators some three miles distant. The complaints arise with reference to traffic originating at points upon the lines of the Canadian Northern and destined to Fort William or Port Arthur, and which takes the through rate, but is required by applicants for delivery at their elevators in transit upon the stop-over privilege of 1 cent per 100 pounds.

Prior to the general interswitching order of July 5, 1908, the charge made by the Canadian Pacific Railway Company for the services in question was $5 per car, and since that order the charge has been 1 cent per 100 pounds, in and out, so while the applicants formerly paid $10 they now pay $12 upon a 60,000 pound car.

The applicants are under the impression that the Canadian Northern Railway Company should be required to absorb some portion of this toll, and that the order of July 5 applied to the class of service here in question.

When the provisions of that order were being considered, there was no intention that it should apply, except at terminals, and it was never intended to have application to movements required to enable milling in transit upon a through rate. The initial carrier becomes entitled to the extra 1 cent per 100 lbs. above the through rate for the services performed upon its own line, delay in releasing its cars and the like, afterward receiving the grain or product for transmission to its destination at the balance of the through rate. The 1 cent was regarded as a reasonable toll for these privileges to the shippers, and it would not be fair to require the carrier to absorb a portion of a switching service performed by an intermediate carrier that might not only dissipate the 1 cent per 100 lbs. but also the balance of the through rate.

In the case in hand, the Canadian Northern is required to carry the grain in question, or its product, on to its destination, after being cleaned or ground at Winnipeg, at the balance of the through rate, and it does not seem reasonable that the 1 cent per 100 lbs. it receives for the stop-over privilege it grants should be encroached upon for the purpose of assisting in the payment of a switching charge made by the Canadian Pacific Railway Company for the convenience of the applicants, and rendered necessary by reason of the elevators not being on the lines of the Canadian Northern; at any rate it was not present to the mind of the Board that the order of July 5 should apply to such a situation. Winnipeg is not the terminal point to which the grain in question is shipped. It is an intermediate point only. The terminal or point of destination is the lake port to which the shipment moves upon a through rate.

The interswitching order provides 20 cents per ton as a reasonable toll with $3 minimum and $8 maximum. These figures were not established as being aplicable to the class of service at an intermediate point in connection with traffic that is not joint, but were fixed at what might as all round be regarded reasonable when applied to all carriers performing switching services in order to make delivery at terminal points, and the Board is of opinion that tolls for services performed by an intermediate carrier to enable the shipper to enjoy stop-over privileges must be determined as reasonable or otherwise quite apart from the provisions of the interswitching order.

The Canadian Pacific Railway was represented by counsel at the hearing, and the Board had the advantage of hearing the views of its representatives. No evidence was given of the cost of the service in question, or otherwise.

The Canadian Pacific tariff of 1904 provides for a charge of $3 for the service in question. Subsequent tariffs fix the toll at 1 cent per 100 lbs., minimum of $5, and this latter is the sum that was charged prior to the order of July 5. The provisions of that order not being applicable to this service, the charge should not have been made upon the basis provided for in it, but the company should have continued the tolls exacted before its issue. The $5 charge may be regarded as reasonable and tariffs should be filed accordingly. Refunds in excess of the $5 already paid cannot be directed, as strictly speaking the companies charged the tolls called for by their tariff, although why they were not imposed before the making of the interswitching order did not appear.

The Canadian Pacific Railway Company should be added as a party respondent.

An order, directing that on grain carried via Winnipeg at the lawfully published and filed through rate, with the privilege of stopping in transitu for the purpose of manufacture, storage, or treatment, on the tracks of another railway company within its yard limits at Winnipeg, and on which the additional 'stop-over' charge, duly published and filed (if any be made), does not exceed one cent per 100 pounds, the further additional tolls collectable by the company on whose tracks the industry or warehouse is situated, for switching the said grain from the point of interchange at Winnipeg or St. Boniface to the proper unloading tracks, and for reswitching the said grain, or the product thereof, back to the said point of interchange, shall not exceed five dollars ($5) per car load, regardless of weight, in each direction; the said tolls to become effective at Winnipeg not later than the 17th day of May next, and to be shown in the grain tariff which provide for 'stoppage in transitu' at Winnipeg for the purposes herein indicated, as well as in the tariffs of interswitching tolls,—issued April 20, 1909.

John McKenzie, J. H. Scobell and Rideau Lumber Co. v. Grand Trunk Railway.

John McKenzie, of Ormsby; J. A. Scobell, of Kingston; the Rideau Lumber Company of Ottawa, and others, complained that the freight rates charged by railway companies on telegraph, telephone and trolley poles were unjustly discriminatory with respect to the rates charged on lumber and other forest products.

Chief Commissioner Mabee, in delivering the judgment of the Board (March 25, 1909), 8 Can. Ry. Cas. 339, said: 'The impression I formed at the hearing was that, although there was some extra risk in the carriage of poles, yet that no reason existed why they could not be safely loaded if proper care were exercised. I think an order should issue embodying the recommendations of the Chief Traffic Officer.'

Mr. Hardwell, Chief Traffic Officer of the Board, reported as follows:

'Prior to the issue of the order of the Board dated July 30, 1904, Scobell v. Kingston and Pembroke Railway Company, telegraph poles were not rated in the Canadian freight classification, but were specified for carriage by special contract only. By that order wooden telegraph, telephone and trolley poles were added to the list of commodities which are included in the Canadian classification under the heading of "lumber." The classification now reads as follows:—

Logs, masts, piles, spars, telegraph, telephone and trolley poles, timber and transverses. . . . . L.C.L. 4 C.L. 10

Under the classification, the minimum carload weight for 10th class traffic is 30,000 lbs. per car of not over 36 feet 6 inches inside or platform length, and that is the minimum charged for short poles on single cars; on long poles Rule 1 (c) provides that long poles requiring two or more cars for carriage are charged the 10th class minimum of 30,000 lbs. for the first car, and two-thirds of the classification minimum, or 20,000 lbs., for each additional car over which the poles extend.

That order did not mean that the companies were to charge 10th class rates and none other on poles, any more than on lumber and other forest products which are generally carried at commodity rates; the intention was to abolish the special contract privilege as tending to variation and discrimination. Whether or not, as a result of that order, taken in connection with the remark of the Chief Commissioner in the judgment that "the second ground of complaint that the rates upon telegraph poles were excessive in that they were higher than the rates on ordinary lumber, the Board was not satisfied that this matter of complaint had been fully and sufficiently argued," the companies, in the following November, issued new tariffs on forest products, in which the ordinary 10th class rates, under the Canadian classification, were substituted for the special mileage scale which had previously been in force. That old mileage scale, applicable, by the way, between the stations of one company only, made the rates on telegraph, telephone and trolley poles 20 per cent higher than the rates on common lumber; also, under that scale, the minimum weights for long poles requiring two or more cars were 30,000 lbs. on the first car, or the same as for single cars, and 20,000 lbs. for each additional car, so that the carload minimum weights then were practically the same as they are now.'

It was stated at the hearing, by Superintendent Donaldson, of the Grand Trunk, that on his division (the old Canada Atlantic and O.A. & P.S.) the pole shipments numbered probably 1,500 cars a year, and that about 85 per cent were short poles carried on single cars. It also appeared from the evidence that the risks of transportation which the companies considered entitled them to higher rates on poles than on lumber pertained to the long poles rather than to the short ones. These risks, however, seemed to be attributable very largely to the lack of inspection and the non-observance of the rules of the Master Car Builders' Association governing the loading of lumber, logs, poles, &c., on open cars, known as the "M.C.B." rules, No. 30 of which reads as follows:—

'All material carried on two or three cars must always be examined by a competent inspector before the cars are moved from the loading point. If an inspector is not stationed at the loading point, the agent must give notice to the proper authority when the cars are loaded, so that proper inspection may be arranged for. The object of such inspection is to see that these regulations have been complied with.'

The M.C.B. rules give detailed instructions as to the loading of logs, poles, &c., the size of stakes, tie wires, &c., and are accompanied by explanatory diagrams, and

if these rules are strictly complied with, there would seem to be no reason why telegraph poles, under ordinary conditions, should not be safely carried. Similar risks are incurred with respect to improperly staked lumber, and the evidence seems to me to prove that the difficulties complained of should be preventable by rigid inspection rather than by the imposition of higher rates. Whether the rate be low or high, the risk exists—possibly the higher the rate the greater the risk, as shippers would probably be inclined to greater carelessness on the theory that they were paying the companies well for any extra duties thrown upon them.

It was also stated, as a reason for the higher rates, that empty cars had often to be hauled considerable distances for loads, whereas box cars may be immediately available for lumber shipments; but this same empty movement of flat cars is frequently necessary in the case of lumber and machinery shipments, racked cars for bark, flats for logs or square timber, &c.

As regards the practice elsewhere; the Canadian Pacific carries both long and short poles on its main and branch lines in British Columbia, at the same rate as charged for lumber, but the minimum carload weights are not so favourable as in the east. These minimums are somewhat variable, but in most cases the long poles are carried at a minimum of 30,000 pounds for each car used. It is true that the rates in British Columbia are greater than in eastern Canada, but so also is the cost of haulage.

As the companies do not file their local tariffs with this Commission, I have not the means of knowing what the local rates of the companies operating in the United States may be, except in the case of the Michigan Central, whose local commodity tariff on lumber and forest products, G. F. D. No. 7576, effective July 7, 1908, I have before me. This tariff applies between all stations on the Mackinaw division and branches north of Bay City, Mich., and it applies on telegraph and telephone poles, as well as on lumber and the other forest products which are usually carried at lumber rates. The minimum weight is in accordance with the official classification, which provides a minimum of 34,000 pounds for single cars, and only 50 per cent (or 17,000 pounds) for each additional car. The rates also are lower than charged by the same company between its stations in Canada, and by the other Canadian companies. I have examined a number of joint tariffs on forest products between two or more companies within the United States, and these cover telegraph poles also.

In my opinion, taking into consideration the fact that lumber rates are applied on short timber, logs, ties, fence posts, and the like; the evidence and the practice elsewhere; the rates charged on short poles in eastern Canada are unjustly discriminatory with respect to the rates charged on other forest products loaded on single cars, and that the companies in eastern Canada should be required to carry wooden telegraph, telephone, electric light, and trolley poles, on single cars, at the same local and joint rates as lumber, when not subject to uncontrollable competition; or, in the words of the order of the Board in the case of Gillies Bros. and the Rideau Lumber Co., dated August 1, 1906, that the tolls 'shall not be higher than the tolls provided in the special (local and joint) tariffs of the companies to apply on common lumber; except that it shall not be obligatory on the companies to charge thereon such tolls as may be made necessary by the competition of carriers not subject to the Railway Act when such competitive tolls are lower than the lowest special tariff of tolls between the same points on common lumber issued under ordinary transportation and trade conditions.' I think, also, that the phraseology of that order should apply with respect to shipments of poles from points in Canada to points in the United States between which joint rail rates on general traffic are, or may be, made by the Canadian railway companies with the concurrence of their United States connections.

As regards poles too long for a single car and requiring more than one car for their carriage, I believe the companies are reasonably entitled to higher rates than for single cars, and I would recommend that the scale used by the companies themselves

prior to November, 1904, be prescribed, namely, 20 per cent higher than for single car, the minimum weights to be in accordance with rule 1 (*c*) of the Canadian classification, and in the computation of the additional rate the fractions to be disposed of as follows, namely: ·25 and under, nil; ·26 to·75=¾ cent; ·76 and over=one cent; the rates in no case to exceed the 10th class rates between the same points.

Order, dated March 25, based upon the traffic officer's report, issued accordingly.

Winnipeg Jobbers' Association v. Canadian Pacific, Canadian Northern and Grand Trunk Pacific Railway Companies.—Winnipeg Rate Case.

The Winnipeg Jobbers' Association applied to the Board for an order directing the Canadian Pacific Railway Company to restore the traders' tariffs previously existing in western Canada, from Winnipeg, as a distributing centre (giving the Winnipeg traders the benefit of the balance of the through rate on reshipments) instead of the new tariffs recently put in force by the railway company.

Upon a complaint by the Portage la Prairie board of trade, the Board had held that this system of traders' tariffs was illegal, as being unjust discrimination and undue preference in favour of particular persons and between different localities, and the charging of higher tolls for a shorter than for a longer distance where the shorter distance is included in the longer.

The railway company complying with the view taken by the Board, had substituted the tariffs complained of by the applicants.

The application was heard at the sittings of the Board held in Winnipeg on the 16th and 17th September, 1908.

The facts are fully stated in the judgments of the Board:—

September 17, 1908.—Chief Commissioner Mabee, 8 Can. Ry. Cas., 175:—The main branch of this case has been very fully and completely presented, and so far as the legal questions involved are concerned, I propose to deal with them now.

This matter grows out of a complaint made by the Portage la Prairie board of trade. I do not regard it as being a continuation of that matter, but I should have thought that perhaps it had better be regarded as consequent upon the order made by the board upon the complaint of the Portage la Prairie board of trade. That matter was fully considered by the Board, and the late Chief Commissioner gave his reasons in writing. It is said no formal order issued, but the railway company has attempted to comply with the view taken by the Board. The Railway Act of 1903 brought about this complaint. I do not think it has been stated how long the then existing system had been on foot, but that is immaterial. For the purpose, I presume, of establishing Winnipeg as a distributing centre, or at least assisting in that the railway companies—first the Canadian Pacific Railway Company—adopted this system of giving to Winnipeg traders or wholesalers, the benefit of the balance of the through rate on reshipments. That was confined to certain persons, who, I presume, were selected by the company or by some other body, and trade was carried on under these traders' tariffs.

A complaint was brought against this system by the Portage la Prairie board of trade, and the contention was raised that this system was discrimination as against localities and discrimination as between individuals. The Board, in its judgment, pronounced that system to be illegal, and ordered the railway company—or the railway company consented—I think the late Chief Commissioner says—to file tariffs with the view of eliminating the objectionable feature. Those tariffs having been filed—the Winnipeg interests being hard hit by them, it is contended—applied to the Board to withhold its consent to their going into effect. Those tariffs may be excessive; I do not know whether they are or not, because there is no evidence given

upon the point. It is said by counsel for the applicants that the Board is bound to find that they are excessive, because they have the effect of increasing the rates in existence under the tariffs that were held to be illegal, because discriminatory.

Now, I do not in any way disapprove of the proposition advanced by Mr. Henderson—and in support of which he cited cases—that where a rate that has been in effect with the approval of a railway company, and apparently to their satisfaction, is raised by another tariff, it is incumbent, other things being equal, upon the railway company to show why the rate should be increased. The cases cited support that principle, and it appeals to one as being reasonable. A toll has been established upon which it is presumed a reasonable profit arose to the carrier, and if, without any change in the conditions, the carrier makes up his mind that he will increase the toll, it is only reasonable the carrier should show why the toll should be increased. But that is not the present case. In this case this traffic was being carried under tariffs that gave the Winnipeg dealer upon reshipment to certain persons the balance of the through rate. That was declared to be, upon this complaint illegal, because it was preferential and discriminatory in favour of Winnipeg. I do not set that tariff out of mind for the purposes of comparison, simply because it was declared to be illegal. I set it out of mind, because it never was—so far as reshipments are concerned—regarded by the parties, either the railway company or the shippers, as a local tariff. It was not a local tariff; it was the balance of the through rate, and I am not aware of any case in which a court has looked to the balance of a through rate as being a reasonable sum to establish as a local rate. We have got no evidence, it seems to me, which would enable us to presume one way or the other with reference to that old rate.

In addition to that—and increasing the difficulties of the position contended for by counsel for the applicants—during the same period that the Winnipeg merchant enjoyed the benefit of the balance of the through rate, there were side by side with that, local tariffs in existence, and which people not favoured under the traders' tariffs were compelled to use. It is said now that the new tariffs which have been filed do not raise the rates that were in existence under the old local tariffs and which the general public were compelled to pay. That being so, it seems to me it is idle to argue that the Board, under the authorities that have been cited, is compelled to adopt the old balances of through rates as reasonable local rates under the new tariffs. Mr. Henderson practically admits that there is no other evidence than the presumption that should be drawn from the circumstances he relies on. Taking the view I do, it is quite clear then that there is nothing in this case upon which the Board can put its finger and say: This is an excessive rate. It may be excessive. I do not know as to that; there is no evidence that it is, and the Board cannot act without evidence.

Then, two other branches of the case present themselves, and one is with reference to the granting of commodity rates out of Winnipeg. I understand it is argued to-day or was yesterday for the first time, that that should be granted. It may have been contended for earlier, but I do not know how that is. Mr. Chrysler takes the position that the Board cannot order the railway company to grant every locality and every place a commodity rate. As to that, I am rather inclined to the view that his contention is right. I do not finally dispose of it at the moment, but it seems to me off-hand that it is the railway companies that have the right to frame their tariff. The Board does not frame the tariff, and the public does not frame the tariff; the statute gives the railway company the right to frame its tariffs. And while the statute gives certain control over the tolls to the Board of Railway Commissioners, it does not by any means put the Board in the position of being able to in all cases control the carrier in the fixing of his tolls. I am inclined to the view that the carrier has the right under the statute to name the localities as to which commodity rates may be granted, but as to that, I do not express any conclusive opinion. The matter presenting itself in this way, I only indicate in the meantime what my unconsidered view of it is, so

that the question as to the granting of a commodity rate may be regarded as not being disposed of, but reserved for consideration along with the second branch of this application, and which I now shall briefly advert to.

Mr. Hardwell suggested yesterday that the Ontario town tariffs might be taken as a basis for local tariffs applicable to the western provinces. I do not know to what extent he had previously had an opportunity of considering that question; I do not know yet whether these could be taken as the basis and made applicable to this part of the Dominion. I do not understand that the railway companies would have any serious objection to that being done, provided their revenue was not seriously disturbed. I do not know whether, in order to get reasonable local tariffs throughout the western provinces, these Ontario tariffs could be built upon, and standardized as Mr. Hardwell suggests, eliminating the features I mentioned which Mr. MacInnes referred to, and taking into consideration the other surrounding conditions, trade conditions of every kind, population, geographical situation and so on. That is a matter that will require very much more careful consideration than it has been possible for my brother commissioners or myself to give it since the proposition was first raised by Mr. Hardwell. It is a matter that should also be fully and very carefully considered by the railway traffic experts, and by the business interests that would be affected by the disturbance of a system that has grown up in the western provinces, and which is different, as was stated, from the system that has been applicable to the other sections of the Dominion. As to whether that should or should not be done, I do not now decide. It is a matter, as I have said, that will require very careful consideration and perhaps discussion.

In the meantime, the conclusion is that it is impossible to grant this application, and by any sort of order bring about the system that was ordered by the Board to be discontinued upon the application of the Portage la Prairie Board of Trade.

There is no evidence upon which we can reduce these tariffs that have been filed, to the same sums that were paid by the favoured few under the old traders' tariff. There is no evidence upon which we can reduce, by 12½ per cent, as was requested, or by any other percentage, the tolls for the carriage of this traffic.

The case, therefore, in my view, resolves itself into two questions: First, as to whether it is possible under the statute to compel commodity rates or commodity tariffs; and second, whether it would benefit the public to standarize the Ontario tariffs and endeavour to make them applicable to western tariffs.

The main application must fail.

These other two questions have grown out of it.

We think it wise that the situation should be dealt with now that it has arisen. We think we should consider whether it is advisable to adopt the suggestions made by Mr. Hardwell, and further consider whether the Board has jurisdiction to order commodity rates in the manner asked for. It is only right and proper that the Board should observe the facts that have been given in evidence, and deal with the situation, although it was not covered by the original application. So that, while we are refusing the application as framed, we are reserving the two points, viz.: The advisability or the possibility of applying the Ontario town tariffs, standardized and made suitable to the differing conditions, and the possibility of granting the request made for the commodity rates.

October 24, 1907. Hon. A. C. Killam, Chief Commissioner, 8 Can. Ry. Cas. 180—This is a complaint of the Board of Trade of the town of Portage la Prairie, in Manitoba, against a series of special freight tariffs of the Canadian Pacific Railway Company, expressed as 'To be used on reshipments by Winnipeg wholesale houses only to traders doing business at or tributary to stations specified herein.' The grounds of objection to the tariffs are that these tariffs are illegal inasmuch as they are discriminatory as between different shippers and different consignees, and also as between different communities.

Evidence was taken in the matter before me alone at Winnipeg, under a special order of the Board. Notice of the taking of this evidence was given to the Winnipeg Board of Trade, that those representing the commercial interests of Winnipeg affected by or interested in the tariffs might have an opportunity of taking part in the proceedings and of taking any action which they might desire in support of the tariffs objected to; and the president, the secretary, and two other members of the Winnipeg Board of Trade attended.

The evidence given before me showed that no persons, outside of those whose names appeared upon a certain list of wholesale merchants doing business in Winnipeg, could ship goods under the rates mentioned in these tariffs, and that the company had no tariff giving similar rates to other persons or classes, and that the rates, also, were limited to shipments, to consignees whose names appeared in certain lists of traders furnished to the railway company's agents at the different points respectively. The evidence further showed that shipments made by or to others than the parties named in these respective lists were governed generally by the rates in the ordinary mileage tariffs of the company, which were considerably higher than the rates in the tariffs objected to. The evidence further showed that there was no tariff of a similar description for shipments by similar classes of persons from Portage la Prairie, but that such shipments were governed by the ordinary mileage tariffs under which the rates were higher for proportionate distances. It further showed that, in some instances, the rates from Winnipeg under the tariffs objected to, were lower than those charged from Portage la Prairie to points westward therefrom, although the goods were carried over the same routes from Portage la Prairie in addition to the distance from Winnipeg to Portage la Prairie. The evidence also showed that, in many cases, the rates from Winnipeg to Portage la Prairie under these tariffs were much less for the same classes of goods than those from Portage la Prairie to Winnipeg.

Opportunity was given, both to the railway company and the Winnipeg Board of Trade, to discuss the subject and to offer any remarks or arguments which they might desire to make in regard to the complaint.

While counsel for the railway company did, to some extent, contend that the tariffs were justified by the conditions existing, when they were originally framed, no real argument in support of them was made. The gentlemen of the Board of Trade were informed that if, after further consideration and taking legal advice, they desired to offer anything in support of the tariffs, it would be considered by the Board. They did state that, as these tariffs had been established for a considerable length of time and business had been transacted under them, it would be unfair and would cause too much disturbance in business to have them suddenly abrogated. All this occurred some two months ago, and no communication has since been received from the Winnipeg Board of Trade.

While refusing at the time to express an opinion upon the subject, I warned the parties that it would be advisable that they should prepare for a change. Ample opportunity has now been given for the purpose, and I have been informed by the Assistant Freight Traffic Manager of the railroad company that the company is prepared to substitute by the 15th November next new tariffs which would not be open to the objections put forward by this complaint.

In my opinion the objections to the tariffs are well founded; they appear to me to be contrary to the provisions of the Railway Act prohibiting undue or unreasonable preferences in favour of particular persons and unjust discriminations between different localities and the charging of higher tolls for a shorter than for a longer distance where the shorter distance is included in the longer, and which require that all tolls shall always, under substantially similar circumstances and conditions in respect of traffic of the same description, &c., be charged equally to all persons.

In my opinion the parties interested should be notified that the Board considers that these tariffs are contrary to the provisions of the Railway Act and that they

will be disallowed, and that the railway company should, not later than the 15th day of November next, file and put in force other traiffs in lieu of those complained of.

I think it advisable that the Board should not, in this instance, determine the rates to be substituted, as much delay would be involved in making the necessary inquiries; but that it will be sufficient to disallow these tariffs, allowing the company to substitute new ones, which may be made the subject of complaint if found to be unjust to any interests.

Winnipeg Jobbers' Association v. Canadian Pacific Railway Company.—Kootenay Rate Case.

The Winnipeg Jobbers' Association applied to the Board for an order directing the railway company to restore the former Winnipeg westbound rates to the Kootenay district.

After the judgment of the Board in the Vancouver eastbound v. Winnipeg westbound rate case, reported in the third report of the Board at pages 133 et seq., the Canadian Pacific Railway Company removed the discrimination there found to exist between localities, by raising the Winnipeg westbound rates.

The Winnipeg Jobbers' Association applied for an order directing the railway company to restore the former Winnipeg westbound rates to the Kootenay district. The application was heard at Winnipeg on the 16th and 17th September, 1908.

Held, that the application must fail, there being no evidence that these rates were excessive.

Judgment, Chief Commissioner Mabee, September 17, 1908:—8 Can. Ry. Cas. 173. We do not think, Mr. Chrysler, that it is necessary to trouble you in connection with the Kootenay branch of this matter.

Mr. Henderson has very properly admitted that in view of the finding of the Board in connection with the Vancouver eastbound rates v. Winnipeg westbound rates, he is not able to further press the complaint.

It is quite apparent that in that proceeding, in which the Winnipeg interests were represented, an attempt was made to attack the then existing Vancouver-Nelson rates, and evidence was given by the railway companies justifying the 85 cent toll. It seems to have been carefully investigated, as the judgment shows, later on by Mr. Hardwell, who reported that the figures submitted by the railway company were substantially accurate and correct.

The late Chief Commissioner, in a very carefully considered opinion, deals with the various features, including the one I have adverted to, and the conclusion was arrived at that it was impossible for the Board to declare that the eastern tolls out of Vancouver were excessive. The determination of the Board further in that matter was, that the complaint of the Vancouver interests against the western rates out of Winnipeg was well founded; discrimination was found to exist, and the railway company was ordered to file a tariff that would remove that discrimination.

Now, Mr. Henderson very properly and candidly admits, if he is not able to successfully attack the westbound toll out of Manitoba, that the only way the railway company could comply with the order of the Board and remove the discrimination that was found to exist was by raising the westbound rates from Winnipeg. That the railway company has done, and no evidence has been given that these rates are excessive. I do not say whether they are or are not excessive, but I do say that no evidence has been adduced to that effect.

Counsel has practically admitted that he cannot hope to succeed upon the application as it stands, but he has asked to have it further enlarged to be dealt with later on. My brother Commissioners and I are both of the opinion that the better way to dispose of the matter is to now dismiss the application, giving leave to the applicant, if he so chooses, to file a new application in accordance with the rules of

procedure of the Board, in which he must fully detail and set forth whatever grievances he thinks he has and that the Board has power to remedy. The former application was merely a verbal one, taken up I have no doubt in Winnipeg by the late Chief Commissioner as a matter of convenience. With the leave to the applicant, which I have referred to, this present application may be considered refused.

Malkin & Sons v. Grand Trunk Railway Company.

Malkin & Sons complained that higher rates were charged by the Grand Trunk Railway Company from a point on a branch line for a shorter distance than from points on the main line to the same point, thereby constituting unjust discrimination between different localities within the provisions of section 315 of the Railway Act.

The application was heard at Toronto on May 20, 1908. The facts are fully set forth in the judgment of Mr. Commissioner McLean, concurred in by the Chief Commissioner Mabee, Mr. Commissioner Mills dissenting, holding that unjust discrimination had been shown.

Judgment, Mr. Commissioner McLean, November 28, 1908 (8 Can. Ry. Cas., 183):—In this case it was complained that the Grand Trunk charged higher rates on tan bark from Sprucedale than from Burk's Falls and Sundridge; these three stations all being on the lines of the Grand Trunk Railway. Sprucedale is eleven miles west of Scotia Junction on what was formerly known as the Canada Atlantic Railway, a line which is now controlled by the Grand Trunk by stock ownership. Burk's Falls and Sundridge are 10 and 21 miles, respectively, north of Scotia Junction on the main line of the Grand Trunk Railway.

The essential points of the complaint may be indicated by a consideration of the distances and rates involved in the shipments to one of the points consuming tan bark:—

To Berlin.	Miles.	Special commodity rates.
From Burk's Falls	201	8 cents.
" Sundridge	212	8 "
" Sprucedale	202	10 "

It is alleged that this is proof of an unjust discrimination against Sprucedale.

It was shown in evidence that from all points within a zone extending from Kearney, a short distance east of Scotia Junction to Depot Harbour, a distance of some 58 miles, there was a group rate on tan bark. For example, all points within this group paid 10 cents per 100 pounds in carload shipments to Berlin. The applicant Malkin, stated in evidence (vol. 62, p. 3734) that what he especially objected to was this grouping. Counsel for the applicant also urged that Sprucedale should be given a lower rate than the further distance points included in the same group.

It was contended by the respondents that while the Grand Trunk Railway controls and operates what was formerly the Canada Atlantic Railway, the latter company still retains its legal identity, and that substantially the same relations should exist between the two companies at present, in respect of the division of the through rates, as existed before the unification of control and management took place. This is not material as an answer to an allegation of discrimination.

It is established that there has been a material reduction of rates. When the Canada Atlantic was operated as a separate railway, the rate on tan bark from Sprucedale to Berlin, to take one of the points affected, was 11 cents; when the Grand Trunk obtained control of this line in 1905 the rate was reduced to 10 cents, and the rate was further reduced on March 7, 1908, to 9 cents, a reduction of approximately 18 per cent, in the period in question.

The central point in the complaint is one of group rates complicated by consideration of main line and branch line traffic. Group rates of necessity result in a certain amount of discrimination; so long as the discrimination is not undue, such rates are not unlawful. Desel-Boettcher Co. v. Kansas City Southern Railway Company, 12 I. C. Rep., p. 222.

So far as the complaint regarding the Kearney-Depot Harbour group is concerned, this was met by the issue of a special freight tariff (Sup. 13 to C. R. C. No. E-517) which broke up this group and gave Sprucedale the advantage of its proximity to the junction point.

While under existing tariff conditions the Sprucedale rate is 9 cents, and the Burk's Falls rate 8 cents, the difference in rate is not conclusive as regards the question of discrimination.

Counsel for the applicant holds (see evidence, vol. 62, p. 3730) that this is a discrimination which is forbidden under subsection 4, of section 315, which states that: 'No toll shall be charged which unjustly discriminates between different localities.'

In the application of section 415, subsections 1 and 5 afford certain tests which are to be used by the Board as criteria of discrimination. These are inequality of tolls in respect of any or all of the following conditions:—

1. Under substantially similar circumstances and conditions.

2. In respect of all traffic of the same description.

3. In respect of all traffic of the same description carried on or upon the like kind of cars.

4. Passing over the same portion of the line of railway.

5. Like description of goods carried under substantially similar circumstances and conditions in the same direction, over the same line, a greater charge made for a shorter than for a longer distance, the shorter being included in the longer.

The tests which are applicable to the facts of the case are the first and fourth.

(1) Substantially similar circumstances and conditions.

The traffic concerned originates on a branch line. The Board has recognized that branch line freight rates may be on a higher basis than main line freight rates to shorter distance points, so long as the rates are not unreasonably or disproportionably higher. Almonte Knitting Company v. Canadian Pacific and Michigan Central Railway Companies. 3 Can. Ry. Cas. 441.

Inferentially it is justifiable to apply the same principle in respect of traffic originating on a branch line. This establishes an initial dissimilarity of circumstances.

While not holding that the entire cost of the upkeep of a particular branch line, division or other portion of a railway must in every case come from the receipts of such portion, it must at the same time be recognized that each ton or passenger moving over such portion must, if the traffic is light, contribute a proportionately higher amount per unit to such upkeep than in the case of a portion of line where the traffic density is greater. The lighter traffic on what was known as the Canada Atlantic is a material fact.

(2) Traffic passing over the same portion of the line of railway.

It is apparent that in so far as the passing of the commodities over the 'same portion' of line is concerned there is an initial dissimilarity of circumstances which does not disappear until the junction point is reached.

It does not appear that the difference in rates now existing as between Sprucedale and Burk's Falls brings the complaint within the provisions of section 315 of the Railway Act, and judgment should therefore be given against the applicant.

Chief Commissioner Mabee.—I agree.

December 7, 1908.—Mr. Commissioner Mills (dissenting).—Having to dissent from the judgment in this case, I wish to state briefly my reasons for doing so.

Regarding branch lines of railway, it is alleged in this judgment that, unless in exceptional instances, 'it must be recognized that each ton or passenger moving over such portion (that is, over a branch line) must, if the traffic is light, contribute a proportionately higher amount per unit to such upkeep (the upkeep of the branch line) than in the case of a portion of the line where the traffic density is greater, 'each ton or passenger must contribute a proportionately higher amount'; and then, on this ground alone, it is held not to be unjust, in other words, that it is fair and reasonable, to charge a considerably higher rate on traffic which originates on a branch line, than is charged on the like traffic when it orginates on a main line, in the same locality, and is carried the same distance—even a greater distance—to the same destination, the former being carried 16-17 and the later 17-17 of the total distance (202 miles) over the main line.

Now, referring to the above dictum regarding branch line traffic, I might ask whether it is right to assume that branch lines which, owing to lighter traffic or other causes, show less direct profit than the main line (perhaps not much over the cost of operation and maintenance) do not make a reasonable return to the company, and conclude that as a consequence the traffic (every ton of freight and every passenger) moving on such branch line 'must' be made to pay higher rates than are paid for like traffic on the main line? Is it not a fact that the capital invested in branch lines is generally much less per mile than that invested in the main line—less expensive bridges, comparatively inferior roadbeds with sharper curves made to save expense, lighter rails, less expensive stations, lighter engines and less valuable passenger cars? Is it not also a fact that the service on branch lines is nearly always less frequent, less regular and worth less than that on the main line? Branch lines figured alone may not make a very good showing, but they may nevertheless pay well as feeders to the main line; and without such feeders the profits on many main lines would be greatly reduced.

If this doctrine regarding the traffic on branch lines is sound, it follows that the Board ought to rescind or vary the order of the late Chief Commissioner fixing the passenger fares to be charged by our railway companies at three cents per mile on all lines, including every branch line, operated in any part of the Dominion between Calgary and the Atlantic ocean; and the said companies should at once be authorized to issue higher and different tariffs, both freight and passenger, for many, perhaps most, of their branch lines, varying them from time to time, so that they shall be inversely proportional to the traffic on each branch compared with that on the main line.

The main line of the Grand Trunk Railway runs from Montreal to Toronto and on west to Sarnia; and many branches run off from it in different directions, among which are a portion of what was known as the Canada Atlantic, extending from Coteau on the main line, a distance of 339 miles, to Depot Harbour, and the branch running from Toronto, north a distance of 227 miles, to North Bay. The latter branch crosses the former at Scotia Junction; and, in the immediate vicinity of the said junction, there are three places from which tan bark is shipped to, say, Berlin, Ont., namely, Sprucedale, on the Canada Atlantic branch 202 miles from Berlin; Burk's Falls, on the North Bay branch 201 miles from Berlin; and Sundridge, on the North Bay branch 212 miles from Berlin—all in a group; and, in making rates under the group system, the fundamental point is that all shippers in the same group shall, regardless of distances, be charged the same rate to common markets, in order that, so far as freight charges are concerned, no one in the group will be at a disadvantage in the markets to which they all ship.

In this case, the rate on tan bark from Sprucedale to Berlin is 9 cents per 100 pounds, while that from Burk's Falls and from Sundridge to Berlin is 8 cents per 100 pounds; that is, a shipper at Sprucedale is charged 12½ per cent more on a carload of tan bark shipped to Berlin, than a shipper at Burk's Falls is charged on a carload of

the same commodity, shipped by the same railway, the same distance, to the same destination, and 12½ per cent more than is charged on a like shipment from Sundridge, ten miles farther, to the same destination. This is an undoubted discrimination against Sprucedale; and in the judgment of my colleaguess it is admitted to be a discrimination; but it is held not to be unjust—in other words, it is justified and approved—simply and solely on the ground that traffic from Sprucedale originates on a branch line and is carried eleven miles out of 202 miles on a branch line, while traffic from Burk's Falls and from Sundridge originates on and is carried all the way on a so-called main line (the North Bay branch); therefore, it is held to be just, fair, and reasonable to charge Sprucedale 12½ per cent more for a given service than is charged to Burk's Falls and Sundridge for the same or a greater service—in spite of the practice of the company at Allandale, on the same line, in dealing with traffic from the Collingwood and Penetanguishene branches, and at a large number of other junction points where there is no extra charge on traffic from branch lines, even when the said traffic is carried for long distances over branch lines.

Speaking for myself, I can only say, in the language of the Chief Traffic Officer of the Board, that 'I am unable to see any exceptional conditions to justify a higher rate from Sprucedale' than from Burk's Falls and Sundridge. Hence I cannot concur in the judgment of Mr. Commissioner McLean, which is based upon what appears to me to be a strained interpretation of two phrases in section 315 of the Railway Act. The judgment was a surprise to me; and, if followed in subsequent judgments, it will undoubtedly benefit persons who live near main lines of railway, and result in serious injury to those who have to travel and do most of their shipping on branch lines.

I say nothing about the reasonableness or unreasonableness of the rates in themselves—9 cents per 100 pounds, from one of the places in question, and 8 cents per 100 pounds from the other two places; 8 cents or 8½ cents might be or might not be a fair and reasonable rate from the three places. The evidence on the point is very meagre. Hence I do not feel warranted in expressing an opinion; but my judgment is that a discrimination of 12½ per cent against Sprucedale—because it has to ship eleven miles out 202 miles, or a little less than one-seventeenth of the total distance to destination, over a branch line—is unjust; and that the railway company should be required to cease and desist from charging persons who ship from Sprucedale a higher rate than it charges persons who ship from Burk's Falls or Sundridge, the same or a greater distance, to the same destination.

The Grand Trunk Railway Company v. United Counties Railway Company.

The facts of the case are as follows:—

Counsel for the Grand Trunk claimed that the increased cost to that company of carrying on its business occasioned by the crossing should be borne by the junior company under the agreement. The contention of counsel on behalf of the United Counties Railway Company was that the Grand Trunk was the senior road only so far as the track existing at the time of the order of the Railway Committee of the Privy Council of March 21, 1893, was concerned; that, although the Grand Trunk, under its charter, had the right to build additional tracks, yet if another company is incorporated in the meantime and actually builds its railway and crosses the only track then in existence, and then some years later the senior company constructs additional tracks, the company which was the junior road at the time of the first order was made for a crossing, should not have to bear the expense of protecting the additional tracks laid by the Grand Trunk.

April 22, 1908, Mabee, Chief Commissioner, 7 Can. Ry. Cas 294:—In view of the statutes that have been cited (and indeed Senator Beique admits it), the Grand Trunk at the point in question is the senior road. The facts quite justify the admission. The original incorporation of the ancestor of the Grand Trunk at the point in question

in 1845, the agreement of 1853, and the Act incorporating the original road with the Grand Trunk in December, 1854, the introduction in that Act of the Railway Clauses Consolidation Act, and the section of the Railway Act referred to giving the railway company the right to lay one or more tracks, the road having been constructed, all make the Grand Trunk the senior road, at any rate down to the date of the agreement of 15th April, 1893, with the United Counties Railway (which was the predecessor of the Quebec, Montreal and Southern Railway) so that there is no manner of doubt that as to the single track the Grand Trunk was the senior road.

I am not able to follow the argument of Senator Beique that there can be seniority as to one of these tracks and not as to the other, and the ruling is that the Grand Trunk is senior not only to the track already constructed, but as to the intended double track.

Canadian Northern Railway Company v. Canadian Pacific Railway Company.

This was an application by the Canadian Northern Railway Company for an order for the crossing by its Hartney-Regina branch over the Wolseley-Reston branch of the Canadian Pacific Railway Company, asking at the same time that the order of the Board approving the location of the latter branch, be varied. The only question argued was as to which of these branches was the senior road.

The plans of the Hartney-Regina branch of the Canadian Northern Railway were approved by the Board on the 17th June, 1904, and registered on July 26, 1904. The plans of the Wolseley-Reston branch of the Canadian Pacific Railway Company were approved by the Minister of Railways and Canals on February 24, 1905, and registered on April 5, 1905. The approval of the Board was granted on July 18, 1905, and the plans again registered on October 3, 1905.

The contention of the Canadian Northern was that the prior approval and registration of plans of the Hartney-Regina branch made the road senior to the Wolseley-Reston branch of the Canadian Pacific Railway Company. Construction work upon these two branches commenced at about the same time, but the Wolseley-Reston branch at the point of crossing in question was built first and that road was in operation when the construction work on the Hartney-Regina branch reached the crossing. The Canadian Pacific had some years prior to the sanction of the plans of the Wolseley-Reston branch, obtained a patent covering the land at the point of crossing, and that company was the owner of the land at the point in question long prior to the approval of the plans.

May 14, 1908, Mabee, Chief Commissioner, 7 Can. Ry. Cas. 297:—I do not think that the mere approval by the Board of the plans filed with it necessarily gives seniority to the plans first approved. Section 159 of the Railway Act defines the effect of approval or sanction, which it is said shall be deemed to be merely approval of the location of the railway and the grades and curves thereof, as shown in the plan, profile, and book of reference, but not to have relieved the company from otherwise complying with the Act; and in granting sanction or approval, the Board is bound by the general location as approved by the Minister of Railways, and may only sanction a deviation of not more than one mile from any point on the general location as approved by the Minister.

It seems to me that the railway that is in actual occupation, with an existing work upon the ground, with the ownership of the fee at the point of crossing, has much stronger claims to seniority than the railway which has merely obtained a prior sanction of its plans; and I have no hesitation in holding that the Wolseley-Reston branch of the Canadian Pacific Railway Company is, at the point in question, senior to the Hartney-Regina branch of the Canadian Northern Railway Company; and the terms and conditions of the crossing order must be based upon such seniority.

Grand Trunk Pacific Railway Company v. Canadian Pacific Railway Company.

This was an application by the Grand Trunk Pacific Railway Company, under section 227 of the Railway Act, for leave to cross the track of the Canadian Pacific Railway Company (Pheasant Hills branch), in township 29, in the province of Saskatchewan.

The applicant company claimed to be senior to the Canadian Pacific Railway Company at the point of crossing. The crossing had been constructed and paid for by the applicant company and the point in issue was as to the cost of construction and maintenance.

The evidence disclosed that the Canadian Pacific Railway was prior to the applicant company both in the sanction and location of its line of railway, as well as construction work upon the ground, but after this application was made to the Board, the applicant company obtained from the Crown a patent covering the land at the crossing, and the contention of counsel on its behalf was that by reason of owning this land it was in a position to cross the line of the Canadian Pacific Railway free from burden.

Judgment, May 14, 1908, Mabee, Chief Commissioner (7 Can. Ry. Cas. 299):—I do not think this to be the fact. 44 Vict., chap. 1, contains the contract entered into between the government and the Canadian Pacific Railway Company. Paragraph 14 of the contract gives the company authority to construct, equip, maintain, and work branch lines of railway from any point or points along their main line to any point or points within the territory of the Dominion, and before commencing any such branch, provision is made for deposit of a map or plan of such branch in the Department of Railways. The government was bound under the contract to grant to the company the lands required for the roadbed of such branches, and for the stations, station grounds, buildings, workshops, yards, and other appurtenances requisite for the efficient construction and working of such branches, in so far as such lands were vested in the government. Paragraph 10 of the contract made provision that the government should grant to the company the lands required for the roadbed of the railway and its stations; this, I presume, applying to the main line. Then, in pursuance of this contract, the branch in question was constructed; thus, in my view, entitling the railway company to obtain a grant of the lands required for the roadbed.

By 3 Edward VII., chap. 7, being the Act respecting the construction of the National Transcontinental Railway, the agreement forming the schedule to that Act is ratified and declared binding upon His Majesty; and under section 46 of the contract the government of Canada binds itself to procure to be granted to the Grand Trunk Pacific Railway Company, in so far as the same are vested in His Majesty in right of the Dominion of Canada, such lands as may be required for the right of way of the western division, and for all stations, station grounds, &c.

At the time this application was made, the Grand Trunk Pacific Railway Company had not acquired title to the land at the point in question; but since the application a grant has been obtained pursuant to the provisions of the contract above referred to.

It does not appear why the grant was made to the Grand Trunk Pacific Railway Company in the face of the statutory contract entered into under the provision of 44 Vic.; and I am of the opinion that the Canadian Pacific Railway Company, having constructed by virtue of the authority of that statute, became entitled to a grant covering its roadbed, and that, for the purposes of the application of the Railway Act and the disposition of the question of seniority as between these railway companies at the point in question, the production of the Crown grant by the Grand Trunk Pacific Railway Company should not be allowed to have the effect of displacing or

curtailing the rights which the Canadian Pacific Railway Company obtained under prior legislation and acted upon by placing its railway upon the ground.

I am clearly of the opinion that the Canadian Pacific Railway Company is senior to the Grand Trunk Pacific Railway Company at the point in question, and the order must contain terms based upon that company being so senior.

New v. Toronto, Hamilton and Buffalo Railway Company.

This was an application by Henry New, of Hamilton, under sections 252 and 253 of the Railway Act, for an order directing the Toronto, Hamilton and Buffalo Railway Company to provide and construct a suitable crossing where its railway abuts the land of the applicant in the township of Barton, county of Wentworth.

By the construction of the T. H. & B. Railway, applicant was deprived of access to a travelled road except by passing over the land of his sons and crossing a number of railway tracks, and the object of the application was to obtain access to the said road by a crossing over the railway, for the purpose of more conveniently carrying on his manufacturing business, but not in any way for farm purposes or as a farm crossing.

Judgment, Chief Commissioner Mabee, October 30, 1908, 8 Can. Ry. Cas. 50:—I think under the circumstances of this case and the land-locked position of the applicant's lands, it is not unreasonable to allow him a crossing of the nature of a farm crossing over the lands of the railway company. The company objected that the crossing, not being intended for farm purposes, could not be ordered by the Board. I do not think the Act should be construed in such a narrow manner. So to construe it would produce great injustice and hardship in many cases. The parties did not produce the conveyances affecting the lands of the applicant or of his predecessors in title, or of the railway company's right of way at the point in question; and we are in the dark as to terms and conditions therein, if any.

There seems to be no greater danger, indeed less, in allowing the applicant to cross at or near where he desires, than to require him to obtain access to Trolley street over the lands of his sons, if he were able so to do, and as to which there is no evidence.

I do not think it needful to refer to the cases cited by counsel, as I have come to the conclusion that the Board may as a matter of discretion grant the crossing asked for.

It may be that this crossing can be located at a point less inconvenient to the railway company than that demanded by the applicant, and the Board's engineer will inspect the premises and locate the crossing upon the ground.

All expense connected with the construction of the crossing will be borne by the applicant.

The company asks that it should be idemnified by the applicant for all damage they may be put to by reason of accidents at this proposed crossing. I do not think this reasonable, as damages might arise through the grossest kind of negligence of its employees, and it would be manifestly unfair that such should be visited upon the applicant. When the engineer inspects the premises, he may make inquiries as to the hours that the line of railway is mostly used, and if he finds it possible to limit the hours that the applicant may use the crossing, in order that possibility of accidents may be minimized, he may report to the Board his conclusions, and before the order issues, those (if any) will receive due consideration. The engineer will also report as to such protection, if any, as he deems necessary.

Order, directing the railway company, at the expense of the applicant, to provide and construct at once a crossing in the nature of a farm crossing at a point about ninety feet east of the frog on the site of the present crossing, as shown on the plan filed; and directing the applicant to put up and maintain a sign at the gates leading

to the Hamilton Pressed Brick Company's Works, warning people to look out for trains and to close the gates, issued December 2, 1908.

Re the Application of Charles Slade for a farm crossing over the Canda Southern Railway, on the Southwest Quarter of the south half of lot 12, concession 8, township of Raleigh, Kent county, Ontario.

Charles Slade, of North Buxton, Ontario, applied to the Board, under sections 252 and 253 of the Railway Act, for an order directing the Michigan Central Railroad Company to provide and construct a suitable farm crossing on the south half of lot 12, concession 8, township of Raleigh.

At the hearing the railroad company consented to provide a suitable crossing upon the boundary line between Charles and Fred Slade's farms, in the said township of Raleigh.

The facts of the case are fully set forth in the dissenting judgment of Mr. Commissioner Mills.

The judgment of Chief Commissioner Mabee, October 21, 1908, concurred in by Mr. Commissioner McLean, was to the effect that the offer of the railway company was fair, and that the crossing should be put on the boundary line.

Judgment, Mr. Commissioner Mills, dissenting, November 5, 1908:—

It is not long since the applicant got possession of the farm in question. It came to him by will, being half a 100-acre farm formerly owned and worked by his father Robert Slade, from whom the railway company purchased its right of way. Since Charles Slade obtained possession of his fifty acres, he has been using a crossing on his brother Fred's farm, which lies immediately east ; but Charles Slade's buildings are near the side of his farm farthest distant from his brother's farm, and therefore the use of the crossing on his brother's farm is a great inconvenience to him and a constant annoyance to his brother.

Under the above circumstances, Charles Slade applied to the railway company for a crossing over the railway on his own farm; and the railway company refused to grant his application, on the ground that he had no legal right to a crossing. Hence his application to the Board of Railway Commissioners.

At the hearing the railway company again alleged that Charles Slade had no legal right to a crossing, but admitted that he needed one, and offered to remove the crossing on Fred. Slade's farm to the boundary line between Charles and Fred. Slade's farms, and let Charles Slade use it in common with his brother. This Charles Slade strongly objected to on the ground of very great inconvenience to him; but the opinion of the Chief Commissioner, then expressed, was that Charles Slade's farm, being only a part of his late father's farm, he, Charles Slade, had no legal right to a crossing offered by the railway company; the company to put in and maintain the gates and planking and Charles Slade to do and maintain the grading necessary for the said crossing.

Now, in reference to this opinion I may say that, after careful reading and study of sections 252 and 253 of the Railway Act, I have to confess my inability to see that a farmer's legal right to a crossing over a railway is to be determined, or is in any way affected, by the manner in which he obtains his land, whether by grant from the Crown, by purchase from a private vendor, by inheritance, or by the will of a testator.

The language of section 252 seems to me very plain and specific, that 'every company shall make crossings for persons across whose lands the railway is carried, convenient and proper for the crossing of the railway for farm purposes.' Also section 253, 'The Board may, upon the application of any landowner, order the company to provide and construct a suitable farm crossing across the railway, wherever in any case the Board deems it necessary for the proper enjoyment of his land on either side of the railway, and safe in the public interest'; and subsection 2, 'The Board may

order and direct how, when and where, and by whom, and upon what terms and conditions such farm crossing shall be constructed and maintained.'

Neither in these sections nor anywhere else in the Act do I find a word authorizing the Board to say that an applicant has no legal right to a farm crossing, simply because his land came under the provisions of his father's will. The land in question undoubtedly is a farm, owned and worked as a farm, and cannot be so worked, unless the owner gets a crossing over the railway at some point; for, as I stated above, 29 acres of his farm are north of the railway, while his buildings, orchard, farm lane and 19 acres are south of the railway, the buildings being on the side furthest distant from his brother Fred's farm, on which there is a satisfactory crossing.

It is admitted on all hands that the applicant requires a crossing over the railway; and it is provided in section 252 of the Railway Act not only that such a crossing shall be provided, but that it shall be 'convenient and proper for the crossing of the railway for farm purposes.' How, then, can it be maintained that he (Charles Slade) has no legal right to a farm crossing over the railway, and on what ground is it ordered that he must either do without a crossing or accept the extremely inconvenient crossing offered by the railway company?

The distance to be travelled by Charles Slade in going to work on, or in driving live stock to the 29 acres lying north of the railway is as follows:—

	Feet.
From the barn to highway on the south	462
Along highway, east, to boundary line between farms	744
From highway, north, to crossing provided for in order	462
Distance across right of way of railway company	100
	1,768
Length of each trip in return	1,768
	3,536

This, in a word, means a trip of about two-thirds of a mile every time he goes to and from work on the north side of the railway, and two-thirds of a mile every time cattle are driven to and from the north 29 acres of the farm, for pasture, water, milking, or any other purpose—which certainly will result in great inconvenience, constant annoyance and a serious loss of time.

In view of these facts, I cannot avoid the conclusion that by forcing the applicant, Charles Slade, to accept a farm crossing over the Michigan Central Railway, away at one side of his farm,—at the side farthest distant from its orchard and farm buildings,—on the boundary line between his farm and that of his brother Fred Slade, or be completely cut off from access to the northern 29 acres of his 48-acre farm, the Board is doing Charles Slade an irreparable injury,—putting him to great and permanent inconvenience, requiring him to do a large amount of unnecessary travelling from day to day, and compelling him constantly to incur very serious loss of time—all without benefit to the railway company, the travelling public or any individual; for, by the order referred to, the railway company will have to remove the present right-angle crossing which is on Fred Slade's farm, and construct a more expensive and dangerous acute-angle crossing, slanting over its tracks on the boundary line between Fred and Charles Slade's farms, furnishing a pair of separate but contiguous gates for each farm; Fred Slade will have to make a short lane from his present crossing to the boundary line between his farm and that of his brother Charles; and the risk to the railway company, to trainmen, and to persons who use the railway will, in my opinion, be greater than it would have been if Fred. Slade's right-angle crossing had been left undisturbed in its present position and Charles Slade had been given a right-angle crossing where he wants it,— in line with his farm lane, running from the highway past his buildings, north, towards the railway.

I have stated that, in my opinion, the order in question involves, not only greater expense to the railway company, but greater risk of accidents, with the consequent results to all concerned, than the granting of Charles Slade's application would have involved; and my reasons for making the statement are as follows:—

1st. Precisely the same number of persons, animals and vehicles will pass over the railway tracks at the joint crossing as would have passed over them if Fred. Slade's crossing had been left intact, and a separate, convenient crossing had been given to the applicant, Charles Slade. The traffic is neither increased nor diminished by the substitution of a joint crossing for two separate crossings, one on each farm.

2nd. Inasmuch as, under the order, the brothers will each have a pair of gates under his own control at the joint crossing,—the same as they would have had at two separate crossings,—the danger which may arise from gates being left open, will be precisely the same as, no more and on less than, it would have been with separate crossings, one on each farm.

3rd. It is generally conceded that there is greater risk to life and property when a given amount of traffic is concentrated and carried over a railway by a crossing on a single street or highway, than when it is distributed and carried over on two or more streets or highways, a smaller amount on each. The same must be true in the case of farm crossings—an increase in danger from concentration of traffic at a single crossing.

4th. An acute-angle crossing, slanting over the tracks of a railway, such as that ordered in this case, is admittedly much more dangerous than a right-angle crossing, such as Fred. Slade now uses, and as should, I think, have been given to the applicant, Charles Slade.

Dissent and grounds therefor in brief:—

Therefore, I have most respectfully to dissent from the judgment of the Chief Commissioner, concurred in by Mr. Commissioner McLean.

First, on the ground that the order provides, not for a 'suitable' but for a very *inconvenient* crossing,—and hence is, I think, clearly at variance with the letter and intention of section 252 of the Railway Act, which says, without qualification, that 'Every company shall make crossings for persons across whose lands the railway is carried, convenient and proper for the crossing of the raliway for farm purposes,' not any kind of crossings which the Board may think proper to order, but crossings which are convenient and proper for the crossing of the railway for farm purposes.' The Board may direct 'where.....such farm crossing shall be constructed and maintained' (Section 253); but notice again that the language is 'such farm crossing' that is, the kind of farm crossing provided for in the preceding section—a farm crossing 'convenient and proper for the crossing of the railway for farm purposes.' The crossing provided by the order in question will, I presume, be 'proper' as regards the matter of construction, although it will be an acute-angle crossing, constructed obliquely over the railway; but, on account of its location, it will be strikingly and distressingly *inconvenient,* and therefore, I maintain, at variance with the Act as quoted above.

Second, on the ground that, without benefiting any party or interest, the said order will, not only deprive the applicant, Charles Slade, of the proper enjoyment of his farm on the north side of the railway, but will do some injury to Fred. Slade, and will result in more expense to the railway company and greater danger to trainmen and to the travelling public than would have resulted from simply granting Charles Slade's application for a crossing, say a right-angle crossing, on his farm.

My judgment is that Charles Slade's application for a farm crossing, say a right-angle crossing, over the railway at the point indicated by him (693 feet from the boundary line of his brother's farm, measured along the right of way of the railway company) should be granted; the railway company to put in and maintain the grading required for a suitable crossing.

Order, dated 14th January, 1909, directing that the crossing be constructed on the boundary line between the farms of Charles and Fred. Slade, as aforesaid; and requir-

ing that the crossing be provided with separate gates for entrance into each of the fifty acres, issued in accordance with the judgment of the Chief Commissioner and Mr. Commissioner McLean.

City of Victoria v. Esquimalt and Nanaimo Railway Company.

This was an application by the city for an order to review, rescind, or vary order of the Board dated October 8, 1907, and for an order, under section 238 of the Railway Act, directing the railway company to submit to the Board a plan and profile of the railway at the place or point where its main line of railway crosses the land known as the old Esquimalt road, in Victoria west; and also for an order, under section 237 of the Act, for leave to construct a level crossing for vehicular traffic, and to remove existing fences across the said highway.

The application was heard at the sittings of the Board held in Victoria, February 27, 1909.

The facts are contained in the judgment of the Chief Commisisoner.

Judgment, Chief Commissioner Mabee, March 16, 1909:—

The old Esquimalt road was for many years prior to the construction of the Esquimalt and Nanaimo Railway a public highway leading from the city of Victoria to Esquimalt. At or prior to the construction of the railway, a new highway was established leading to Esquimalt, but the old road was never closed and has ever since remained and still is a public highway, and is a public street within the limits of the city of Victoria.

In the construction of the railway the grade fell much below the street level, on one side four or five feet; no public crossing was provided and fences were erected along the sides of the right of way, thus closing the street for vehicular traffic. This was done without any apparent authority, but was acquiesced in by the city authorities and the public.

On October 4, 1907, the railway company applied for leave to maintain, in its then condition, a stile for foot passengers only at this crossing, and the city of Victoria applied for a public crossing. The Board, by an order dated October 8, 1907, granted the application of the railway company and refused that of the city.

On January 30, 1909, the city applied to review, rescind, or vary the order of October 8, 1907, and the case was heard at Victoria on February 27, 1909. The Board had an opportunity of viewing the locality in question and of hearing the views of the engineers for the city and the railway company, and of counsel representing the city, as well as the railway company and certain landowners who were affected by the street being closed.

Conditions have greatly changed of late years in that portion of the city, and the reasonable convenience of the public clearly requires the street to be opened for public travel. The railway company has had the convenience of having the street closed at this point for many years; but this closing can only be regarded as temporary and subject at any time to alteration at the will of the city council, if that course seemed reasonable. The crossing will by no means be a safe one for the public, but it is their right to have it opened. The city could have required that when the railway was constructed, and such right still exists. As a term, however, of opening the crossing, the city should require all the standing trees on the lot adjacent to the crossing to be cut down, so a clear view may be had of the railway towards the city. It should also make arrangements to prevent any building or buildings being erected on the vacant lot across the street from that upon which the trees stand, so the view will not be obstructed and trains coming around the curve be prevented from being seen. The railway company must do the necessary grading and planking for the crossing; the city will have to maintain the crossing when constructed.

Upon the city furnishing evidence by affidavit that the trees have been removed, and that binding arrangements have been made that buildings will not be erected on the vacant lot, the formal order may issue.

Mr. Commissioner McLean, March 26, 1909:—

I agree, but am of the opinion that the following should be added: 'Near the southeast corner of the proposed crossing there are, as shown on the plan on file with the Board, two buildings near the right of way, the one which is most remote being within 100 feet of the right of way. This obstructs the view of those driving up the old Esquimalt road (shown on the plan as Wilson street), towards the proposed crossing. The railway company should, at its own expense, arrange to have these two buildings moved to such a distance from the right of way as will, in the opinion of an engineer of the Board, give a reasonably good view of the curved portion of the track to those who are approaching it from the city.'

Stiles v. Canadian Pacific Railway Company.

The applicant applied to the Board, under sections 252 and 253 of the Railway Act, for an order directing the Canadian Pacific Railway Company, to construct and provide a suitable farm crossing. It was alleged that the present undercrossing was too small to enable the applicant to carry on properly his farming operations, and he applied to have it enlarged.

The application was heard at Toronto on January 27, 1909.

Counsel for the applicant at the hearing contended that the applicant was entitled to ordinary facilities to enable him to farm his land; that the only passage across the railway was an undercrossing which was too narrow; that, apart from any crossing he might be entitled to under a contract with the railway company, the Board had a right under the Act to direct the company to provide and construct a proper and suitable crossing.

Judgment, Chief Commissioner Mabee, January 27, 1909, 8 Can. Ry. Cas. 190:—If we were dealing with this matter under the plan Mr. Moss has just referred to, and giving a crossing where one had not previously been in existence, it might be reasonable to provide a crossing 14 feet in width, and possibly 14 feet in height, if the cost of constructing such a subway was not prohibitive, bearing in mind the value of the property. But that is not this case. We have a case here of a railway company, in 1889, entering into a contract to construct and maintain an undercrossing. That crossing was completed 12 feet by 12 feet, and the man used it for eighteen years, and so far as the railway company was concerned no complaints were made to it that it was not perfectly satisfactory. It would be entirely unreasonable, it seems to me, to disturb the order of things which were apparently satisfactory to the man with whom the contract was made. Under the circumstances we think the contract was fulfilled by the construction of the crossing, and the contract as fulfilled in that way was satisfactory to the then owner of the property, and the present owner of course can take no higher position than his predecessor in title.

Under these circumstances we think the application must be refused, but an order may go requiring the railway company to enlarge this to a 12-foot crossing, by 12 feet in height, and to continue the maintenance of it as the contract calls for.

Essex Terminal Railway Company v. Windsor, Essex and Lake Shore Rapid Railway Company.

On August 12, 1905, the township of Sandwich West passed a by-law authorizing the W. E. &c., Ry. Co. to construct its line along a named highway in the municipality, but the powers and privileges conferred were not to take effect unless a formal acceptance thereof should be filed within thirty days from the passing of the by-law. Such

acceptance was filed on September 12, 1905. This was too late, and on July 20, 1907, the council of Sandwich West and that of Sandwich East respectively passed by-laws containing the necessary authority.

In April, 1906, the location of the line of the E. T. Ry. Co., was approved by the Board. In June, 1906, the Board made an order allowing the W. E. &c., Ry. Co. to cross the line of the Canadian Pacific Railway. In March, 1907, another order respecting said crossing was made and also an order approving the location of the W. E. Ry. Co., the municipal consent being obtained three months later.

The E. T. Ry. Co. applied to the Board to have the orders of June, 1906, and March, 1907, rescinded and for an order requiring the W. E. Ry. Co. to remove its track from the highway at the point where the applicant proposed to cross it to discontinue its construction at such point or, in the alternative for an order allowing it to cross the line of the W. E. Ry. Co. on said highway. The applicants claimed to be the senior road and that the W. E. Ry. Co. had never obtained the requisite authority for locating its line. On a case stated to the Supreme Court by the Board.

Held, 7 Can. Ry. Cas. 109 and 8 Can. Ry. Cas. 1, that the Board had power to refuse to set aside the said orders; that the by-laws passed in July, 1907, were sufficient to legalize the construction of the W. E. Ry. Co.'s line on said highway; and that the Board can now lawfully authorize the latter company to maintain and operate its railway thereon.

Held, further, that leave of the Board is necessary to enable the E. T. Ry. Co to lay its tracks across the railway of the W. E. Ry. Co., on said highway.

Held also, that the Board, in exercise of its discretion has power by order to authorize the maintenance and operation of the W. E. Ry. Co., along said highway and to give leave to the E. T. Ry. Co. to cross it and the line of the Canadian Pacific Railway near the present crossing and to apportion the cost of maintaining such crossing equally between the two companies instead of imposing two-thirds thereof upon the E. T. Ry. Co., as was done by a former order not acted upon; and to order that if the E. T. Ry. Co. finds it necessary in its own interest to have the points of crossing differently placed, it should bear the expense of removing the line of the W. E. Ry. Co., to the new point of crossing.

Order, dated March 26, 1909, issued accordingly.

1. Refusing to rescind orders of June, 1906, and March, 1907.

2. Authorizing the Windsor, Essex and Lake Shore Rapid Railway Company to maintain and operate its railway along the Gravel Road, in the township of Sandwich West; and

3. Directing that the cost of maintaining and operating the crossing of the Canadian Pacific Railway Company's tracks and the crossing of the tracks of the Windsor, Essex and Lake Shore Rapid Railway Company by the Essex Terminal Railway Company, and of the protective appliances to be installed at the said crossings, 'be divided equally between the Windsor, Essex and Lake Shore Rapid Railway Company and the applicant company; Provided, however, that if the applicant company shall find it necessary, in its own interests, to have the point of crossing or crossings, differently placed, it shall bear the expense of removing the railway of the Windsor, Essex and Lake Shore Railway Company to the new point of crossing.'

Re Lord's Day Act and Grand Trunk Railway Company.

This was an application by the Grand Trunk Railway Company for an order, under subsection (*x*) of section 12 of the Lord's Day Act, R.S.C., chap. 153, permitting it to do certain work on the Lord's Day in order to prevent undue delay to traffic.

The facts of the case are fully set out in the judgment of the Chief Commissioner.

Judgment, Chief Commissioner Mabee, October 17, 1908 (8 Can. Ry. Cas. 23):—

This application is made by the Grand Trunk Railway Company under subsection (*x*) of section 12 of the Act respecting the Lord's Day.

Section 12 provides that notwithstanding the other provisions of the Act, any person may on the Lord's Day do any work of necessity or mercy. Then in following clauses a variety of matters are declared to be included in the expression 'work of necessity or mercy.'

Subsection (*h*) is as follows: 'The continuance to their destination of trains and vessels in transit when the Lord's Day begins.'

(*k*) 'Work before six o'clock in the forenoon and after eight in the afternoon of yard crews in handling cars in railway yards.'

(*l*) . . . . 'loading or unloading before 7 o'clock in the morning or ofter 8 o'clock in the afternoon any grain, coal or ore carrying vessel, after the 15th September.'

(*x*)'Any work which the Board of Railway Commissioners for Canada, having regard to the object of this Act, and with the object of preventing undue delay deems necessary in connection with the freight traffic of any railway.'

What the railway company asks is as follows:—

'The Grand Trunk Railway Company of Canada hereby applies to the Board for an order under subsection (*x*) of section 3 of the Lord's Day Act, 6 Edward VII., chap. 27, as follows:—

'1. Permitting the said company, by its servants, workmen, and agents, in order to prevent undue delay to traffic, to do on any Sunday, in the province of Ontario, work incidental to the continuance to their destination of cars in transit at the beginning of each Sunday, notwithstanding that the said cars forming part of the train so in transit may not have a common destination, but may require to be switched, shunted, or otherwise dealt with for the purpose of being sent on to their several destinations.

'2. Permitting the said company to do, in the province of Ontario, such work upon any Sunday as may be necessary for the purpose of furnishing to shippers of live stock, a continuous railway service without which such persons would be unduly hampered and delayed in their said business.

'3. Permitting the said company to do, in the province of Ontario, such work upon any Sunday as may be necessary for the purpose of furnishing to and from lake ports, a continuous railway service for carrying grain from elevators and vessels, and without which service such traffic would be unduly delayed.

'4. Permitting, in the province of Ontario, the unloading of grain from vessels at lake ports, and the loading of grain into cars at such ports, and without which service such traffic would be unduly delayed.'

This whole subject received most careful consideration by parliament, and the Act, as it stands, is the result of compromises made by those holding divergent views upon the subject-matter of the legislation, and any encroachment upon its prohibitions can be permitted only for the gravest and plainest reasons.

The Board's jurisdiction arises only in connection with the movement of freight traffic; and as to that it is limited to such classes of work as it deems necessary to permit with the object of preventing 'undue delay'; and in exercising jurisdiction, the Board is bound to have regard to the object of the Act. Of course the object of the Act is well known, and with its general intention of providing for a day of rest in every week all must be in entire sympathy; and in dealing with the application, this must be kept steadily in view.

Parliament dealt very exhaustively with this vexed subject, and the statute was the result of much discussion and contention a very large section of the community looks with a jealous eye upon the Act, and will regard with much concern any order that may be made enlarging its provisions and extending exceptions to its prohibitions. However, in the view I take, the railway companies cannot, under the Act, or any order this Board may make be left in any way masters of the situation, and may be called upon to justify any movement of freight that the order, I think them entitled

to, may cover. In other words, the burden will be upon them to satisfy the court that the particular movement was necessary to prevent 'undue delay,' which in each individual case must be a question for the tribunal before which a prosecution may be launched. So, although parliament has conferred certain powers upon this Board, the result of the section is, I think, that those who interest themselves in the enforcement of the Act may call the companies to account for anything done by them as a result of this application, and so control may be retained and no abuse made of privileges granted by the Board, even if such should be attempted.

Perhaps the most serious feature of this application is that referring to the grain trade. The development of this traffic has likewise received the most careful attention in parliament, and millions of public and private money have been invested in its development—in the deepening and improvement of harbours, the enlargement of ships, the construction of canals, elevators and lighthouses, the enlargement and extension of railway terminals, eliminating curves and lowering gradients—much of which has been compulsory by reason of the keen competition of the American carriers. Along the American lines there are no Lord's Day laws to interfere with or temporarily check the flow. A continual struggle for this carrying trade exists between the routes through Ontario and those through American channels. There may be some extremists who would prefer that this trade through Ontario gateways should be crippled rather than permit it to continue upon the Lord's Day; but I am mistaken in my estimate of the Christian people of the province if there is not a very large majority that would make reasonable concessions to avoid undue interference with this traffic were they satisfied of the existence of the facts that made such course reasonable.

Now, under the Act as it stands, trains and vessels in transit when the Lord's Day begins, carrying grain, may continue to their destination; and after September 15 in each year grain vessels may be loaded or unloaded before 7 a.m. or after 8 p.m. upon the Lord's Day; but it is said that this carrying trade cannot be retained for Canadian carriers if these limitations are to be strictly observed.

Turning now to the evidence given upon the hearing, Mr. Tiffin, superintendent of the northern division of the Grand Trunk Railway, has under his control the ports of Midland, Collingwood and Meaford; he says that in order to take care of the grain and by prompt movement protect the Canadian route, it is absolutely necessary to move the empty cars upon the Lord's Day, to release the vessels; that these latter must be loaded promptly, that they may return for other loads, and that if this is not done the vessel-owners will carry to American ports where they obtain a continuous service; that this would mean to the vessel owner a trip or two more in the season than to Canadian ports. The time of arrival of these vessels cannot be fixed, owing to weather and other conditions, and that he has seen on Sundays two vessels at Meaford, four at Collingwood, and six or eight at Midland, all waiting to be unloaded. This grain all passes through the elevators, and only one vessel can unload at a time at each elevator. The cars for this grain will have to come to the ports empty; and when the elevator is full, the empties are required to receive the grain through the elevator from the ship, or unloading must stop. This grain comes from Port Arthur, Duluth, Chicago and Fort William, and Mr. Tiffin says that at times they have been unable to handle this traffic even by working seven days a week; and that to prevent undue delay, after September 15 and for two months after the opening of navigation in the spring, it is necessary to haul the empty cars in train-load lots through to the lake ports on the Lord's Day, load from the elevator, and start them on to their destination.

Mr. Donaldson, superintendent in charge of Depot Harbour, states that in years of good crops the railway has more grain to handle through that port than can be cared for by working seven days a week; that there are 'tramp' vessels bringing grain to Depot Harbour that would go to American ports if they were impeded in

unloading; their arrival cannot be timed, owing to fog, congested condition in the Sault canal, and stormy weather; and that 14,000,000 bushels have been handled through Depot Harbour in one season. This is booked from Chicago, Milwaukee, Duluth, Fort William and Port Arthur, for sailings from Montreal by various steamships, in which space has been taken; and during the rush season it is absolutely necessary, in order to handle this traffic and preserve it over that route, to make movements upon the Lord's Day that are prohibited by the Act. A large amount of package freight from the New England states, New York and Boston, also from Chicago and Milwaukee, passes through Depot Harbour. This is on the upper deck of the vessels and the grain below. The package freight has to be removed before the grain can be got at, and all this increases the difficulty connected with the unloading of grain vessels at the week end.

Mr. Donaldson says the competitive routes with his are those that run to Galveston, rail and ocean to Europe, and the lake ports to Buffalo and Toledo and other elevator points; the grain going via Buffalo continues whether Sunday intervenes or not; if that coming via the Canadian ports is held up for a day, a very serious handicap is put upon the Canadian carrier as against his American competitor.

Mr. W. G. Brownlee, Manager of Transportation of the Grand Trunk Railway says that if they are prevented from taking empty cars to the lake ports on Sunday this season, his road will lose the carrying of 5,000,000 bushels of grain. While the mere money loss to a corporation not allowed to work its employees on the Sabbath may be of no moment, it seems to me the pecuniary loss to the Grand Trunk by not being able to carry this grain is not the only thing for consideration. If it were, I should regard the evidence as of little value. If this grain cannot be carried by Canadian lines it will go through American channels, and others will benefit at the expense of the country whose every effort has been put forth to acquire and hold this carrying trade; and so, instead of merely the Grand Trunk interests being involved, it is the larger question of the commerce of the country being at stake, and while I am not at all of the opinion that this is a reason for making a week-day of the Sabbath, I do think that some modification of the Act may be made so that this traffic may be retained, and yet that the minimum of Sunday work be permitted. The railways carrying grain from Georgian Bay ports are in competition not only with the American railways but also experience the keenest competition from the all-water routes, not only in the movement of eastbound grain but in the westbound traffic. Depression in lake traffic has diverted many vessels from the upper lake carrying trade to the longer routes to St. Lawrence points or through to Montreal. The movement of this year's crop will tax to the utmost the capacity of the rail carriers from Georgian Bay points, and to place themselves in a position to compete with some degree of success with other routes, and obtain a share of this carrying trade, special tariffs were filed by them with the Board, to become effective September 4, reducing the wheat rate to 5 cents per bushel from Georgian Bay points to Montreal. It is manifest from the conditions above indicated and others that exist, that some degree of freedom, consistent with reason, should be extended to the rail carrier from Georgian Bay points; others beside those who stand for strict Sabbath observance in Ontario are concerned in this matter. Freight rates to ocean ports are of vital interest to the western farmer, and any barrier along the route reflects upon the price obtainable by him for his wheat.

Again, Ontario is a mere link in the route to the seaboard, and under the Act, as it stands, vessels and trains in transit through Ontario, when the Lord's Day begins, may continue to their destination. Grain vessels may continue loading or unloading up to seven o'clock in the morning, and may again resume after eight o'clock in the evening, after September 15, upon the Lord's Day. It is sworn and not contradicted that the grain carrying trade cannot be carried on if stopped between 7 a.m. and 8 p.m. (except where vessels and trains are in transit). It does not seem reasonable, in

view of the vast interests involved both to the carrier and to the whole country, that this traffic should be destroyed by undue delay.

The railway company asks permission to furnish to shippers of live stock a continuous service, without which such persons would be unduly hampered in their business; but upon this branch no evidence was given by any live stock shippers, and the facts given upon the hearing do not justify the Board in interfering with existing conditions.

The next request is that in order to prevent undue delay to traffic certain shunting be permitted on the Lord's Day. Subsection (*h*) of section 12 gives leave to continue to their destination 'trains and vessels in transit when the Lord's Day begins, and work incidental thereto.' The interpretation clause of the Act does not define the word 'train.' Subsection 32 of section 2 of the Railway Act defines 'train' as including any engine, locomotive, or other rolling stock.

The applicants allege that great delay and loss will ensue if they are prohibited from continuing to their destination individual cars that may be in transit when the Lord's Day begins, and perform the work incidental thereto. Let a concrete case serve as an illustration; twenty cars of cattle leave Palmerston on Saturday evening, fifteen for Montreal for export by steamer sailing on Monday, five cars for Toronto, where the train arrived at, say, three o'clock on Sunday morning. What was the destination of this 'train'? It is contended the railway employees cannot leave the five cars for Toronto when the train arrives there and carry the other fifteen to Montreal, but must either hold the whole train at that point or take the five Toronto cars on to Montreal. To leave the five cars means breaking up the train, and this, it is said, cannot be done. It may be said that the Toronto cars should not have been attached to the train and so the difficulty was caused by those responsible for making up the train. Perhaps had another freight train been leaving Palmerston for Toronto to which the five Toronto cattle cars might have been attached, 'undue delay' in getting those cars to Toronto might have been avoided by not mixing the Toronto and Montreal cars; but suppose the Toronto cattle had to be there for Monday morning and no other train that could carry them was leaving Palmerston on Saturday night, it is manifest these cattle must be taken by special train, making a prohibitive freight rate, or not reach Toronto for Monday morning.

I do not think any harm will follow or any encroachment be made upon the spirit or object of the Lord's Day Act by giving the company liberty to leave the five Toronto cars at their destination and continue to Montreal with the other fifteen cars. Suppose this case actually occurred and the company was prosecuted, it would still have to establish that the whole movement was necessary in order to avoid 'undue delay,' not only dropping the Toronto cars at that point but the making up of the train in this manner at the starting point.

Illustrations might be multiplied, many of which would show how this privilege might be abused by the railways in bringing to, say, Mimico upon various trains from different points, cars destined to Montreal, and there sorting out the latter and making up an entirely new train. If this is attempted the courts must say whether it was necessary to prevent 'undue delay,' and so I think full control is retained and prosecutions will be effective in preventing abuse of privileges granted by this Board, and care exercised by those responsible for the operation of railways, will prevent the public sense from being offended by unnecessary movement of freight trains on the Lord's Day.

I therefore think that an order may issue permitting the Grand Trunk Railway Company, its servants, workmen, agents, or officers, in order to prevent undue delay to—

(1) Unload grain from vessels at lake ports in Ontario and load grain into cars at such ports between September 15 in any year and June 1 in the year following, upon the Lord's Day.

(2 Between the said dates do such work as may be necessary for the purpose of furnishing to and from such lake ports in Ontario a continuous railway service for carrying grain from elevators and vessels upon the Lord's Day.

(3) Perform all work necessary upon the Lord's Day for the delivery to their several destinations of freight cars that were in transit when the Lord's Day began.

If it was found that attempts are made to abuse the provisions of this order, the Board will cancel it in whole or in part.

Other railways carrying grain from Ontario lake ports are, of course, entitled to the like privileges.

It may not be uninteresting to note that in a report made to the Board on the 9th of June, 1908, by one of its officials in dealing with the question as to whether the Grand Trunk Railway had, during the previous year furnished adequate and suitable accommodation for the carrying, unloading and delivery of traffic offered for carriage upon its lines, the following paragraph appears:—

'The effect upon the power of the company to receive, carry and deliver traffic without delay, in compliance with the provisions of the Lord's Day Act, will, in my opinion, mean a loss of 21 per cent per week, or, in other words, the company would move only 79 per cent of its capacity during the week.'

Order, dated 28th October, 1908, issued accordingly.

Bell Telephone Company v. Windsor, Essex and Lake Shore Rapid Railway Company.

The Bell Telephone Company applied to the Board, under sections 237 and 238 of the Railway Act, for an order directing the Windsor, Essex and Lake Shore Rapid Railway Company to bear and pay the cost of certain changes in the construction of the lines of the applicant company and of certatin protective devices rendered necessary by reason of the construction and operation of the railway. The case was heard at Chatham on October 20, 1908.

Judgment, Chief Commissioner Mabee, October 20, 1908 (8 Can. Ry. Cas. 28):—

We are all of one mind on this application, and there is no reason why it should not be disposed of now.

The contentiton advanced by the Bell Telephone Company is in effect that where a dangerous situation is brought about, like the one disclosed by the evidence, the company imperilled may, without the leave of the Board, or without making any application to the Board, take in its own hands the remedying of the danger, the removal of the danger, and make whatever expenditure it deems reasonable, and later on apply to the Board for an order for payment against the railway company.

It does not seem to me that any reading of section 237 gives the Board authority to make such an order. This section was intended to apply and does apply clearly to a situation rendered dangerous. There, upon an application made to the Board, the Board may take such measures as, under the circumstances, appear to the Board the best adapted to remove or diminish the danger arising or likely to arise. It seems to me the whole object of the section was to place under the jurisdiction of the Board authority to deal with the danger. The Board itself was to exercise its jurisdiction in the ordering of such protective measures as it might deem expedient.

Then section 238 simply carries that a step further, and gives the Board authority to do the like things, although the railway has been located. Section 237 applies to the situation where the application is made for leave to locate or approve.

Now, it seems to me it would be opening the door far too wide to delegate, or for the Board to assume it had the right to delegate to the parties themselves, to decide what protection should be provided, when the statute itself says the Board shall exercise that jurisdiction.

Then counsel asked leave to amend, and that his case should be treated as if he were applying now for an order for protection, and that the Board should adopt the

protection that has been decided upon by the applicants, and order compensation. We think at this stage, notwithstanding our power to make almost any sort of an amendment, that it would hardly be proper to make such an amendment as that. And, even if we did, it would still open up the same difficulty, and we would still be confronted with the same situation, namely, that the company itself has made the changes, and the case would be left pretty much as it is upon the present record.

So far as the merits are concerned, I am personally entirely with the applicants. Of course we have not heard all the evidence that Mr. Wilson had at hand, but it seems to me quite impossible to deny that the Bell Telephone Company have been put to expense by reason of the location of this danger beneath their wires. I think what they did was entirely reasonable. They were acting, as has been reported in the Naylor case, and were simply following out what the engineer of the Board recommended in that case. Whether they would be in fairness entitled to all they claim, is quite another matter, but the merits are not before us, and only incidentally do I refer to it in the way that I have. It comes back to the jurisdiction of the Board, and I am quite clear, and in that view my colleagues join with me, that section 237 does not authorize the Board to make an order of the kind asked for.

The application will be dismissed, but under the circumstances, without any costs.

Order, October 20, 1908, dismissing the application, accordingly.

Winnipeg Jobbers and Shippers' Association v. Canadian Pacific, Canadian Northern and Grand Trunk Railway Companies.

This was an application by the Winnipeg Jobbers' and Shippers' Association, through Mr. Carpenter, manager of its transportation department, to the Board, for an order directing the railway companies,—

(*a*) 'Where the traffic warrants it, to erect a freight shed, and appoint a permanent agent in charge of the business at such station;'

(*b*) 'Not to reduce any regular station with an agent in charge to a flag station without an agent;'

(*c*) 'Not to close any regular or flag station without the approval of the Board of Railway Commissioners.'

The applicants objected also to the terms of the 'Release of responsibility' which the shipper of freight to a flag station is required to sign.

The matter was referred to the Chief Traffic Officer and reported upon by him and his operating assistant. Copies of the Chief Traffic Officer's report were sent to the railway companies concerned and written arguments were submitted by them.

The railway companies, first, questioned the jurisdiction of the Board to make such an order as applied for; and, second, that on the merits no general or blanket order providing for the erection and maintenance of stations should be made.

The facts are contained in the judgment of the Chief Commissioner.

Judgment, Chief Commissioner Mabee, November 2, 1908, 8 Can. Ry. Cas. 151:—

This matter seems to have been first brought to the attention of the Board at a meeting in Winnipeg in September, 1906, by the board of trade of that city, and in February, 1907, a formal complaint was lodged by the applicants.

Several matters were involved in the complainants' petition, and amongst others they ask that the railway companies be ordered to,—

(1) Where the traffic warrants it, erect a freight shed and appoint a permanent agent in charge of the business at that station.

(2) Not reduce any regular station with an agent in charge to a flag station without an agent.

(3) Not to close any regular or flag station without the approval of this Board.

All the railway companies have taken exception to the jurisdiction of the Board to deal with these matters.

Section 284, subsection (*a*) provides that the railway company, according to its powers, shall: 'furnish at the place of starting and at the junction of the railway with other railways and at all stopping places established for such purpose, adequate and suitable accommodation for the receiving and loading of all traffic offered for carriage upon the railway.'

Subsection 3 empowers the Board to order such accommodation to be furnished, having regard to all proper interests.

Section 258 provides: 'Every station of the company shall be erected, operated and maintained with good and sufficient accommodation and facilities for traffic.'

'2. Before the company proceeds to erect any new station upon its railway, the location of such station shall be approved of by the Board.'

'3. In the case of any railway, whether subject to the legislative authority of the parliament of Canada or not, subsidized in money or in land, after the 18th day of July, 1900, under the authority of an Act of the parliament of Canada, the payment and acceptance of such subsidy shall be taken to be subject to the covenant or condition, whether expressed or not in any agreement relating to such subsidy, that the company, for the time being owning or operating such railway, shall, when thereto directed by order of the Board, maintain and operate stations, with such accommodation or facilities in connection therewith as are defined by the Board, at such points on the railway as are designated in such order.'

It is argued, first, that because the above subsection 3 deals specially with railways subsidized after July 18, 1900, the fair construction of the whole Act is that the powers conferred upon the Board by this subsection do not exist as to railways not so subsidized. I do not think this contention well grounded. This section, I think, was intended to extend the jurisdiction of the Board, as to the matters covered by it, to railways not subject to the legislative authority of the parliament of Canada, that is to railways incorporated under provincial statutes, and which had not been declared to be works for the general advantage of Canada; without this subsection, the power of the Board would not extend to such railways, whether subsidized either before or after July 18, 1909.

The second objection is that subsection (*a*) of 284 only requires the railway companies to furnish accommodation at stopping places established for the purpose of 'receiving and loading traffic,' the contention being that 'flag stations' were used for delivering or unloading, and not for 'receiving and loading.'

I do not know that the expression 'flag station' appears in the statute, but of course it has a well known meaning.

Subsection (*b*) of 284 imposes upon the railway companies the duty of furnishing 'adequate' and suitable accomodation for 'the carrying, unloading and delivering of all such traffic.' Section 30, subsection (*g*) provides that the Board may make orders 'with respect to rolling stock, apparatus, cattle guards, appliances, signals, methods, devices, structures and works, to be used upon the railway, so as to provide means for the due protection of property, the employees of the company, and the public.'

It seems to me perfectly clear that under these sections the railway companies are obliged to provide suitable accommodation for unloading and delivering traffic, and if they omit so to provide then the Board has power so to order, and in doing so may require the companies to erect and maintain platforms or freight sheds, or any other 'structures or works' that might be deemed reasonably proper for the protection of property or the public. The statute seems to confer ample power upon the Board to deal with the subject matter of this application.

With respect to the first ground of the complaint, the companies all express their willingness to establish permanent agents 'where the traffic warrants it.' The difficulty is in saying when the traffic warrants such a step. Hitherto this and the other matters involved have been left entirely to the good judgment of those in charge of the management and operation of the railways, and they quite naturally object to interference; but

if I am correct in my interpretation of the statute, it is clear that parliament has placed these matters under the control of the Board, and has imposed upon it the duty of saying when the time has arrived for the appointment of permanent agents, if that is thought by the Board to be part of furnishing suitable and adequate accommodation for the delivery of traffic. It is also stated by the chief traffic officer that in practice the companies receive freight in carload lots at these stopping points, as well as butter, cheese and eggs, in which event they would be required under subsection (*a*) to furnish suitable accommodation for such receiving.

The applicants submit a list of thirty flag stations upon the Canadian Pacific Railway and forty-six upon the Canadian Northern, doubtless now there are many more upon the Grand Trunk Pacific; this matter has been standing so long since originally brought before the Board that the conditions have greatly changed and it is impossible to deal with these stations or stopping places by name and the matter must be disposed of upon general lines.

I have read the evidence and fully considered all the arguments that appear upon the file. I feel myself handicapped by reason of not having been upon the Board during the progress of the proceedings, but am compelled to make the best disposition of the complaint that I am able and deem fair to all concerned. The operating assistant to the chief traffic officer, in October, 1907, dealt with the details of establishing accommodation at stopping places, and later on the chief traffic officer, on November 15, 1907, reported to the Board as then constituted, in some respects agreeing and in others differing from the opinion of the operating assistant; both of these reports I have carefully considered, and while I hesitate to set my judgment up against those of far greater experience in these matters, I am unable to say that I agree with either in all respects.

It must be kept steadily in view that it is almost always in the interest of the railway companies to convenience the public as far as possible. Flag stations are established at points for the convenience of those living at inconvenient distances from the regular stations; and if this Board required unreasonable expenditures to be made by the railway companies at once upon the establishing of a flag station, I fear that a large section of the public might be seriously inconvenienced by the omission to establish such stopping places; it may be that some relief might be had by application to the Board, but I am of opinion that great difficulty would be experienced (assuming there is jurisdiction but as to which I do not decide) in determining when or where a new stopping place should be established without the experience afforded by the receipts and travel to and from an experimental stopping point. For those reasons, I am of opinion that the companies should not be required to establish a heated and lighted station building with a caretaker in charge at these flag stopping points as recommended by the chief traffic officer. On the other hand, I think their practices in the past open to serious comment in omitting to provide any sort of platform for people to alight or stand upon, no sort of shed or shelter of any description to place freight in when discharged at these points, and in leaving goods upon the ground exposed to the elements. It seems to me that some middle course should be adopted that will provide some reasonable accommodation and protection to the public, and at the same time not operate as too great a burden upon the railway companies.

I think it not unreasonable that the companies should, at all stopping places known as flag stations, erect a suitable shelter or waiting-room which could be used for both freight and passengers; it should be provided with a door and windows. I would not require a caretaker to be kept, nor would it be reasonable to require this building always to be kept heated and lighted. There should be some sort of platforms and proper approaches. If the railway companies are willing to accept the foregoing views, the Board will hear them as to the size of buildings and platforms to be provided. If they desire to appeal from the holding that the Board has jurisdiction, we will delay until such appeal is disposed of before settling these details.

Dealing next with the question of appointing permanent agents at flag stations, as I have said, I think the Board has jurisdiction so to order if it deems necessary to furnish to the public adequate and suitable accommodation for unloading and delivering traffic, or for receiving and loading of traffic, and in this view I am confirmed by the late Chief Commissioner in a memorandum of October 11, 1907, in which he says that the Act requires 'the railway company to provide reasonable and proper facilities for receiving, carrying and delivering traffic, and that while the point has never been decided, it may well be argued that the Board has power to require a company to place and keep an agent at a particular station where, in view of the amount of business to be done and other circumstances this would seem to be a reasonable and proper facility to be afforded.'

The question is what amount of traffic warrants the appointment of a permanent agent. I think the Minnesota law not an unreasonable one in this respect. There a total freight and passenger earning of $15,000 requires the appointment of a permanent agent; and I agree with the recommendation of the operating assistant upon this point and I think the companies should be required to appoint and maintain permanent agents at stations where the total freight and passenger earnings amount to $15,000 for the year, and at points where the business consists principally of shipping grain, where such shipments amount to at least 50,000 bushels, agents should be appointed and maintained at such points during the grain shipping season; and at points of shipment where a telegraph operator is located for the handling of trains, such operator should while he remains at such point, be provided with the necessary equipment to enable him to take care of all traffic at such point. It does appear to be necessary at this moment to consider the request that the companies be prohibited from reducing a regular station to a stopping point without any agent, or from closing any regular or flag station without the approval of the Board. It is not to be assumed that such step would be taken without good reason, and I think such cases should be left to be dealt with individually when they arise, assuming there is jurisdiction, as to which I express no opinion.

Strong objections are made, and I think with good reason, to the form of release required for traffic for delivery at flag stations; but I refrain from dealing with this matter at it is now under consideration by the joint committee assembled, pursuant to the request of the Board made in the circular of April last, and will be dealt with by the Board when considering the standard form of shipping bill.

Dignam v. Bell Telephone Company.

This was an application by J. S. Dignam, of Toronto, under the provisions of the Railway Act for an order directing the Bell Telephone Company to furnish him with a copy of the latest official telephone directory for Western Ontario and the United States.

The application was heard at the November sittings of the Board, 1908, in the city of Toronto.

The facts are fully set out in the judgment of the Chief Commissioner.

Judgment, Chief Commissioner Mabee, November 13, 1908, 8 Can. Ry. Cas. 200:—

We are all of the opinion that this is not a matter that falls within the statute conferring jurisdiction upon this Board.

It appears that the applicant has a contract with the telephone company, and ordinarily that contract would be looked at for the purpose of ascertaining the rights that he might have in connection with the use of his telephone, the price to be paid, the service and facilities to be afforded, and so on. It is admitted that in this contract on foot between the applicant and the telephone company, there is no provision under which the applicant has any right as against the company to be supplied with directories either in or outside the city. It also appears that it is the telephone company's practice to furnish the city subscribers with city directories, but that it is not the

practice to supply to city subscribers directories covering the subscribers outside the city.

The reasons advanced by Mr. Dunstan appeal to one as being founded upon common sense too. It seems that in western Ontario the towns are grouped, and one directory is issued, copies of those are circulated among all subscribers in western Ontario. The same thing applies to central Ontario, eastern Ontario, Quebec, and the city of Montreal.

There is nothing in the contract, nor is there anything in the statute, requiring the telephone company to furnish subscribers in Toronto with lists of subscribers either in eastern, western, or central Ontario.

So that there is no basis upon which the Board could found an order, even if there were jurisdiction so to do, because it does not seem reasonable that the company should be required to furnish city subscribers with these outside directories, thereby entailing upon the company the necessity of calling them all in every six months, or in the event of leaving them out, having their service locked up by errors arising by reason of these directories becoming obsolete, changes in subscribers, new ones coming in and old ones going out.

Then with reference to the ground of complaint advanced by Mr. Dignam, of some one in the telephone office, messenger, or some person of that sort, bringing him one directory, and promising to bring another. It does not seem to me that is a matter the Board could deal with at all. I say nothing with reference to the branch of the case about the directory being withheld on account of the alleged user of Captain Melville's telephone by the applicant. If the applicant had a right to get the western Ontario directory, the telephone company would have no right to withhold it by reason of the applicant having used some one else's telephone. It would be open to the telephone company to take such steps as they might see fit in some other form, but it is sufficient to dispose of this case by simply saying that, in the first place, there is no jurisdiction; in the second place, even if there had been jurisdiction, it does not appeal to us that subscribers in certain districts would be entitled to directories printed for and furnished to subscribers in other districts.

Order, dismissing the application, issued November 25, 1908.

Bay of Quinté Railway Company v. Kingston and Pembroke Railway Company.

The Bay of Quinté Railway Company applied to the Board, under section 364 of the Railway Act, and under any other section applicable to the circumstances of the case, for an order directing the Kingston and Pembroke Railway Company to ascertain and settle the compensation payable by the applicant company to the respondent company in respect of the running rights possessed by the applicant company over a portion of the respondent company's railway.

By an agreement between the companies, ratified by Act of parliament, such compensation in case of dispute was to be settled by arbitration.

The question was whether the Board had jurisdiction to entertain the application.

Counsel for the applicant company contended that jurisdiction was given the Board under sections 30 (*h*) and 176 of the Railway Act. The contention of counsel for the respondent company was that the Board had not jurisdiction, as the agreement was not one to which the sections of the Railway Act applied, but that it was obtained by sanction of an Act of parliament, and being a special Act, came within the provisions of section 3 of the Railway Act and that, when the special Act conflicts with the general Act, the provisions of the special Act override the latter when relating to the same subject-matter.

Judgment, Chief Commissioner Mabee, January 12, 1909 (8 Can. Ry. Cas., 202):—

The position of the matter is not very complicated. The two railways make an agreement and part of the agreement is that compensation, in the event of dispute, is

to be adjusted by a tribunal of their own selection. That being the agreement in perpetuity, they go to parliament and get it ratified. The statute confirming the agreement states that the agreement shall be regarded as re-enacted in each section. Now, it seems to me that parliament has by that special Act stated the tribunal that shall settle the difficulty between these two companies in the event of them not being able to settle it themselves, and that the effect of the special Act is just the same as if there had been an independent and separate section in the Act stating that in the event of difficulties arising between the two companies regarding compensation to be paid to one by the other, such difficulty should be settled by a board of arbitration, one to be selected by each, and an umpire by the two. If that is the proper view of it, I should fancy it could hardly be contended that that would not be a provison that the Railway Act could not override, because of section 3 in the Act, which distinctly states that where the provisions of the Railway Act conflict with any provisions in any special Act, the provisions of the special Act shall override the provisions of the general Act. So that it seems to me perfectly apparent that parliament has provided, by reason of the agreement between these two companies, the tribunal to settle their difficulties, and that the Railway Board has no jurisdiction. It seems to me, further, even if that were not the strict legal view of it, that where two companies have entered into an agreement as to how their difficulties shall be settled, the Railway Board should ask them to abide by the agreement and settle it as they agreed to settle it. The Board is not supposed to intervene for the purpose of destroying agreements between parties. If there had been no agreement, and the parties were at large, then they could not come here, but having provided by their agreement how they should adjust their difficulties, it seems to me that even if the view regarding the special Act that I have enunciated were not correct, it would not be a wise thing for the Board to assume jurisdiction in such cases. We know of many agreements on foot between railway companies regarding leased lines, and so on, where arbitrators fix the compensation. I do not think it would be proper for the Board to intervene and take away the tribunal to which the parties agreed to go, and assume jurisdiction ourselves. We are all agreed that in this case there is no jurisdiction.

Order, dated January 12, 1909, dismissing the application, issued accordingly.

The London Fence, Limited, v. the Canadian Northern Railway Co.

The London Fence, Limited, of Portage la Prairie, complained that the railway company persisted in blocking Broadway street, in Portage la Prairie, with their trains, to the great detriment of the complainants; and applied for an order directing the company to keep the street open, so as to give them free ingress and egress to their factory; and asked that provision be made in the order for the construction of sewers and water mains under the tracks and electrical power lines over the tracks of the railway company.

The matter was heard at the sittings of the Board held by Chief Commissioner Mabee and Mr. Commissioner McLean in Winnipeg, March 10, 1909, and the facts are set out in the judgment of the Chief Commissioner.

Judgment, March 31, 1909:—

We both think in this case it is clearly shown there was an arrangement made between the late manager of the fence company and the representative of the railway, whereby the 30-foot right of way, the closed portion of Broadway on the north side of the Canadian Northern tracks, out to Main street, as shown on this plan, should be provided. It seems that the agreement was acted upon by the railway company. Some obstructions were removed, and since that time the fence company have been using the right of way as arranged out to Main street.

Complaint is made that the arrangement was not submitted to the board of directors by the then manager, and ratified by them, but that is not anything that

the railway company had any control over, it was a matter entirely within the authority of the then manager to enter into this arrangement. It was entered into, I have no doubt, in good faith. The railway company carried out their portion of it. And we have got to see, as far as we are able, that agreements are lived up to, not only by private individuals, but also by the railway companies, if they enter into them. That this arrangement afterwards proved unsatisfactory to the new management is no reason why a further burden should be imposed upon the railway company.

We think that the agreement should be carried out. This roadway may be declared to be a right of way and granted by the railway company to the fence company, if the city of Portage la Prairie will not accept it as a highway, accept dedication of it, and agree to maintain it. Then it may continue to be an easement granted by the railway company as a right of way to this London fence company.

In addition to that, the railway consents, if the city of Portage la Prairie will extend their water main to the north along the tracks of the railway, so that a hydrant may be located at a more convenient point to the fence company, to pay that expense. That, of course, is not anything we can order, because we cannot order the city of Portage la Prairie to supply water or extend the main; but if the fence company can arrange with the city to extend the main across the street and locate the hydrant so that they may save that one-quarter per cent of insurance, then upon Mr. Clark's undertaking, whatever expense the city may be put to in connection with that, will be reimbursed.

The matter stands; the applicants to endeavour to make the arrangements referred to in the judgment.

The City of Toronto and Canadian Pacific Railway and Grand Trunk Railway—The Viaduct Case.

The Corporation of the city of Toronto applied to the Board, under sections 237 and 238 of the Railway Act, for an order directing the Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company or one or other of them, to carry certain streets, named in the application of the city of Toronto, under and over their tracks. The application involved a direction to the railway companies to change or raise, as might be found necessary, the approaches over their tracks at certain other streets named.

The railway companies questioned the jurisdiction of the Board under the sections named to make the directions applied for.

The Board held that it had jurisdiction over the subject matter of the application, and that it would continue the hearing at once or await the result of an appeal from its decision to the Supreme Court of Canada, if that course was decided upon.

Judgment, Chief Commissioner Mabee, June 8, 1908, on question of jurisdiction:

Objection is taken to the jurisdiction of the Board to order the elevation of the railway company's tracks along the Toronto waterfront.

The argument in supporting the objection is based upon two grounds, the first of which is that the Railway Act does not in express terms confer upon the Board the power to accomplish grade separation by the elevation of the railway's tracks, that this can be accomplished only by carrying the highway over or under the railway, and that the approval of the plans and construction of the road in accordance therewith, gives under the various sections of the Act, the railway company the right to continue operating at the grade provided therein.

The second objection is based upon section 3 of the Act and will be dealt with more fully later on.

Sections 237 and 238 are those mentioned in the application as being the ones upon which it is contended there is jurisdiction.

The railway tracks are along the Esplanade, and that is a street or highway; under section 237 if the company applies for leave to construct the railway along a highway it must file a plan and profile with the Board showing the portion of the highway affected and upon that application the Board is expressly empowered to make provision for the protection, safety and convenience of the public, and has authority to require all such measures to be taken, as under the circumstances appear to the Board best adapted to remove or diminish the danger or obstruction arising or likely to arise from the construction of the railway along the highway.

Now, if this were an application of the companies for leave to locate and construct their lines along the Esplanade I think it is perfectly clear that the Board could impose as a term of granting such leave that the track should be elevated or carried upon a viaduct.

Section 238 provides that where the railway is already constructed along a highway the Board may order the company to submit to it a plan and profile of such portion of the railway and upon such submission may make any order in respect thereof as is provided for in section 237; so if I am right in holding that the Board has power upon an original location to require elevation of tracks, it seems to me clear it has the like power notwithstanding the railway is already constructed along the highway.

Section 30 provides that 'the Board may make orders with respect to the structures and works to be used upon the railway so as to provide means for the due protection of the public.'

I do not stop to answer the argument of counsel that the result of holding that the Board had the power contended for would be to hold that it might order an elevated road from Montreal to Windsor or Sarnia or both; it is sufficient to say that I think there is jurisdiction to order elevation of tracks along the Esplanade because the tracks there are located along a highway, the first objection must be overruled. The second objection presents greater difficulty.

Section 3 of the Railway Act is as follows:—

This Act shall, subject to the provisions thereof, be construed as incorporate with the Special Act, and unless otherwise expressly provided in the Act where the provisions of this Act and of any special Act passed by the parliament of Canada, relate to the same subject matter, the provisions of the special Act shall, in so far as is necessary to give effect to such special Act be taken to override the provisions of this Act.'

Now is there a 'special Act' in existence, relating to 'the same subject-matter' as that dealt with in sections 237 and 238, viz., protection, safety and convenience of the public; if there is then it is said that the provisions of the special Act override those of the general Act.

On July 26, 1892, the city, the Grand Trunk Railway Company and the Canadian Pacific Railway Company, the latter representing also the Toronto, Grey and Bruce Railway Company, the Ontario and Quebec Railway Company and all its other leased lines entered into what is called the 'Esplanade Tri-partite Agreement' in which appear most elaborate provisions relating to the rights of the railway companies upon the Esplanade and for the construction of the Union Station. I deal with only a few of its provisions:—

Paragraph 4 provided for the erection of private overhead bridges.

5. The city agreed to prevent the public crossing the tracks on the Esplanade between Yonge and York streets, except at Bay street, and the Grand Trunk Railway waived its contention that it was not liable to contribute to the cost of making or protecting level crossings at Church, Yonge and Bay streets.

7. Provided for the construction of the York street bridge and declared it to be a public highway.

9. Provided for deviating York street, closing a portion of it and the Esplanade.

10. The Grand Trunk agreed to construct the John street bridge.

11. Provision was made for closing Esplanade from York street to Brock and portions of Simcoe, Peter and John streets.

15. The railway companies agreed to pay $15,000 to the city for conveyance of the portions of streets agreed to be so closed.

17. The city consented to the Grand Trunk Railway obtaining a patent from the Crown of the prolongation of Peter street and the companies consented to the city obtaining a patent of the prolongation of Simcoe and York streets, all to the old windmill line.

By 56 Vic., cap. 48 (Dom.) all the works to be done in order to give effect to this agreement were declared to be works for the general advantage of Canada and it (the agreement) was declared to be in force and binding on the parties thereto.

The first question for consideration is whether this agreement and the Act declaring it to be in force and binding, from a 'special Act' within the meaning of section 3 above quoted. Section 2, subsection 28, provides that 'special Act' shall include any Act which is enacted with special reference to such railway; is the 56 Vic., cap. 48, enacted with special reference to the railways in question here? After much reflection I am of opinion that it is not. So far as I am aware there is no direct authority upon the point, but it seems to me, reading the whole of subsection 28 that the fair meaning of the words 'with special reference to such railway' is with respect to the 'construction or operation' of the railway dealt with earlier in the same clause, and that an Act merely declaring an agreement to be in force is not necessarily an Act dealing with the construction or operation of the railway merely because some of the many clauses of the agreement deal with the matters above indicated. The Act does not purport to embody the agreement or make it form part thereof, and the present Chief Justice of Ontario has said that an agreement though ratified by an Act of the legislature still remains a private contract.

(Kingston v. Cataraqui Electric Ry. Co., 25 A.R., at p. 468). It appears to me that if this Tri-partite Agreement still remains a private contract it cannot be regarded as a special Act for the wide and far-reaching purposes for which that argument is advanced.

It may also be the fact that there is no conflict between the subject-matter of the Tri-partite Agreement upon the points under consideration, with the clauses of the general Act sought to be invoked, both the agreement and the clauses of the general Act deal with public protection, safety and convenience and because the agreement, let us say, provides for an overhead bridge at a given point, probably the better view would be that there would be no conflict, within the meaning of this particular legislation between that provision and a clause in the general Act empowering the Board to order a subway, both being means of crossing the railway line, and both being for the safety and convenience of the public and the railway, the overhead bridge or subway being mere incidents, the main feature of the legislation being public safety in the operation of the railway.

The early history of the water front and the growth of the foothold of the railways there was elaborately argued before the Board. I have read the arguments since the hearing, and am of the opinion that there is nothing in all that has been said or advanced to take away the authority of parliament to confer upon this Board authority and jurisdiction to deal with the subject matter of this application, and that such authority has been conferred, and in saying this I am not overlooking the authorities under which the railway titles upon the Esplanade from time to time developed. They hold title and have acquired rights to operate upon the level from agreements made with the city by virtue of orders in council, report of the old Board of Railway Commissioners, which went out of existence in 1868, and legislative enactment pre-confederation, and provincial and federal since 1867.

The history of the matter shows that the proposal now made by the city is entirely opposed to contracts and compacts made by it with the railways from time

to time. Prior to 1892, when the agreement of July 26 was entered into, there had been suggestions for a viaduct, this agreement entirely excluded that proposition.

On April 22, 1905, the city entered into an agreement with the Grand Trunk which, by an Act of the Ontario legislature of the same year was declared valid and binding, for the construction by the railway company of a new union passenger station and yards, this agreement is based entirely upon the operation of the railway tracks upon the level, it provides for the city closing certain streets, a foot bridge from Front street to Lake over the tracks, changes and repairs to York street bridge, and many other provisions, entirely inconsistent with track elevation as now proposed. Upon this agreement the Grand Trunk has acted, and in good faith expended enormous sums of money. Application for the order for the construction of the Yonge street bridge was made by the city, the validity of the order has since been upheld by the Court of Appeal, it is still held by the city—and under it the railways are required to construct a bridge over the tracks. I mention these matters because it was strongly argued that the city had estopped itself from making the present application, that the policy adopted, the contracts entered into, the work done and money expended by both city and railways upon the lines of protection by overhead bridges upon the well known legal doctrine of estoppel prevented the city departing from that mode of grade separation and making application now for an entirely different system. I am of opinion that this argument would be entitled in a court of law to prevail, and that the course taken by the city in the past would absolutely prevent this application from succeeding, but this Board is not a court of law, and no doctrine of estoppel is applicable or binding. The paramount object of the sections under consideration, that which overshadows all and before which everything must give way, is the protection, safety and convenience of the public in the matter of grade separation, and no town or city council by any sort of municipal mismanagement, folly or ignorance can estop itself or prevent the Board taking any step or making any order, otherwise within its jurisdiction, for the protection, safety and convenience of the public.

The question of whether the separation of grade along the water front is to be accomplished by viaduct or overhead bridges is not now being considered; it is that of jurisdiction only, if after all the evidence has been given, every interest considered, and all sides heard, the Board deems the interests of the public require a departure from the policy adopted by the city upon this matter it has it in its power to entirely protect the railway interests, and doubtless will have full regard to all expenditures made by the railways upon the faith of contracts with the city, so that no injustice will be done to, or loss fall upon the railways by reason of variation of plans made, structures or buildings erected, lands purchased or money expended, which would be of no avail consequent upon a changed policy.

Of course, it will not be regarded from the foregoing that any change is contemplated by the Board; that matter has in no way been considered by the Board, and is not ripe for discussion, and these observations are made with the view of indicating how full redress may be had against the city, if there be ground for the same, other than by disputing the Board's jurisdiction to intervene upon behalf of the public.

All that is now being decided is that the Board has jurisdiction over the subject matter of this application, and has authority to order grade separation along the Esplanade either by overhead bridges or viaduct, by depression of tracks or highways in whole or in part as may be deemed the most advantageous in the interest of the public and in the operation of the railways.

I have given full consideration to the argument that there are no streets running to the waterfront. The Court of Appeal has held the contrary as to Yonge street and I have no doubt most, if not all the other passages to the water are highways within ss. 11 of section 2 of the Act where a highway is declared to include any way of public communication.

The Board will continue the hearing of this matter at once if the parties so desire, or await the result of an appeal from this opinion to the Supreme Court if that course is decided upon.

The facts are fully set forth in the judgment of the Chief Commissioner.

Chief Commissioner Mabee, December 30, 1908.

This matter comes up upon the application of the railway companies for approval of plans for a new Union Station at Toronto. This, of course, involves what the elevation of the station shall be, as well as that of the railway tracks that enter it. The railway plans provide for rail level some four feet above the present elevation of the tracks; the station plans provide for a subway for passengers to pass under certain lines to reach the southerly tracks, and as part of the contemplated work the railway companies produce bridge plans and propose carrying Bay and Yonge streets over the tracks to the water front, and suggest that, as the traffic demands it, the streets east of Yonge should be dealt with in the same manner. It is admitted by the representatives of the railways that the time has arrived when grade separation at Bay and Yonge streets must be provided for. They do not admit the necessity for this at the present time, east of Yonge street. The one broad question for determination as this matter now stands is whether this separation of grade shall be accomplished by the city streets being carried over the lines of railway tracks, or whether the latter shall be carried over the streets, and owing to the physical formation of the city water front, either proposition presents the gravest engineering and financial difficulties.

The Railway Act provides that every bridge under which a railway passes shall be so constructed as to afford an open and clear headway of at least seven feet between the top of the highest freight car used on the railway and the lowest beams of the bridge which are over the space occupied by the passing car, and, except by leave of this Board, as to bridges constructed since February 1, 1904, the space between the rail level and such lowest beams shall in no case be less than 22 feet, six inches. This, of course, is to provide head room for those whose duties require them to be on the tops of freight cars.

The railways propose a bridge at Bay street with only about 19 feet clearance with 4·90 per cent grade at the north end and 4·50 per cent grade at the south end. At Yonge street 19 feet clearance and grades of 3·75 per cent and 4·50 per cent respectively. At Church street 20 feet clearance and grades of 3·25 and 4·90; Jarvis, 19 feet 6 inches clearance and grades of 3·25 and 4·50; Sherbourne, 18 feet 6 inches clearance and grades of 2·90 and 4·20; and Berkley, 19 feet clearance and grades of 3·70 and 4·50.

Bay street would necessarily be a point that a large amount of traffic would pass over. These plans, even with this bridge having 3½ feet less clearance than called for by the statute, has nearly a 5 per cent grade going south and 4½ per cent going north.

It does not seem to be possible to adopt the bridge system and obtain grades over the bridges that would be practicable, unless this Board takes the responsibility of permitting structures of less head room than the law provides for.

It was said the rule requiring men to go on the tops of freight cars in the Toronto yards could be abolished; different rules for different terminals would only lead to confusion. The Board's accident inspectors are being continually called upon to investigate accidents caused by lack of head room under bridges, and lack of lateral space along the sides of engines and trains. Our officials have been steadily endeavouring to eliminate these sources of danger, and it is entirely out of the qestion that we should sanction the erection of overhead bridges from York street east, of a character different from that which the law calls for. There are now too many of these structures in various parts of the country, and instead of sanctioning more, it is the plain duty of the Board to endeavour to get rid of those that now exist.

The grade over the bridges is of paramount importance to the future of Toronto. Nothing can prevent the development of harbour traffic, and in years to come a haul-

age over long bridges on 5 per cent grades would impose a tax upon traffic arriving and departing by the water route that should not be permitted. Only a few years ago it was thought by all concerned that in the construction of York street bridge much had been accomplished; to-day about the only question that the railways and the city agree upon is that this bridge must be pulled down. I am free to confess that when I embarked upon this inquiry, I thought the erection of bridges the proper solution of the problem, but the more it is thought out, keeping steadily in view the permanent welfare of a large and rapidly developing city, I am driven to the belief that, if bridges are erected this year, ten years hence would see them all torn down.

Now, if these terminals are to continue on the water front and the streets cannot conveniently be carried over the railway tracks, it is apparent that the latter must be carried over the streets, if grade separation is to be accomplished. Two plans were submitted showing how this could be done, one upon behalf of the city, and one by the Board of Trade. These plans came in for much criticism by the engineers called upon behalf of the railways, and by whose evidence I was much impressed; but the true situation is that neither of these plans were submitted with the idea that they were complete in all details, and it is not contended that very many matters must be considered and be provided for that did not enter into the calculations of those propounding these two plans; indeed it could not have been expected that the Board would order a work of this character to be undertaken by the railways upon either of these plans. I do not consider that any plans are before us, other than for the purposes of illustration, and all that we can now decide is as to the manner that this separation of grade is to be accomplished, and we hold that it cannot satisfactorily be done by overhead bridges. I have adverted to the financial aspect of this matter; the time has not yet arrived to say whether the cost of carrying the railway tracks over the streets is prohibitive, or if not, how the cost is to be apportioned. This must depend upon the plan that is finally decided to be the best for all concerned, and must, of course, have regard to the reasonable operation of trains and the handling of traffic. How the railways would prefer that their tracks should be carried over the streets, the Board does not know. So far they have been contending that the policy of carrying the streets over the tracks should continue. I do not hesitate to say that when it is known that the tracks must go over the streets, the railways can prepare plans of a work that will improve upon those now before us as to convenience in the movement of traffic, and still retain the essential features contended for by those opposed to bridges.

Upon the evidence now before us, I am of the opinion that it is impossible to deal intelligently with the financial side of this question or to fairly divide the expense of the work. The cost of constructing a given number of steel bridges can be estimated with reasonable accuracy, but when their erection involves damages to adjacent lands, filling in the water front, re-arranging or extending the slips and wharfs where large industries exist and carry on their business, building a new street far out in the waters of the bay, it is out of the question to estimate what compensation courts or arbitrators would grant to those whose lands or business were injured. Again, the cost of construction of retaining walls and filling for a viaduct, with the necessary steel work, can be arrived at with reasonable accuracy, but the consequential damages arising, or that might arise, to adjacent properties, by reason of depriving industries of spurs, if that were necessary, possibly doing away with team tracks, narrowing the Esplanade, and other claims for damages that doubtless would be made, cannot now be foretold. About the only matter that is perfectly clear is that either mode of grade separation will prove enormously expensive.

The railway companies should be required to file with the Board, within two months, and at the same time furnish copies to the city, plans, profiles and estimates for the works necessary to separate the grade of the railway from the streets from York to Cherry streets, inclusive, except such as may have been closed. These plans

must make provision that no surface tracks of any kind shall cross York, Bay, Yonge or Church streets and provision must be made for a fourteen foot headway at all the streets at present street level, station plans to be amended to suit the changed elevation of the tracks. I say nothing at present as to the elevation and industrial spurs or yards, as these are matters that should primarily be left to those who are responsible for the operation of the railways, and the handling of traffic at reasonable rates, a full consideration of these matters can be had when the plans are developed.

Nothing upon the subject has so far been said, but should it be thought desirable by the railway interests to deal with the whole situation through the medium of a terminal company, then the latter may file plans instead of, or for, the railways.

The situation at and east of York street only is now being dealt with; that west of York, and from Bathurst to west of the Humber, is to be spoken to at Ottawa on January 12.

My brother commissioners are of the opinion that the matter should be finally disposed of now, and the cost apportioned, so the order will issue in acordance with the views of the majority.

Judgment of Assistant Chief Commissioner Scott, concurred in by Mr. Commissioner Mills, December 24, 1908.

The Board has had the question of the elimination of grade crossings along the water front at Toronto before it for some time. After the unfortunate fire which occurred in Toronto in 1904 when most of the industries south of Front street to the railway tracks from York to Yonge streets were destroyed, the Grand Trunk Railway Company applied to the Board and obtained authority to take the territory mentioned for the purposes of a new Union Station.

After considerable delay on account of litigation the property for the new station was acquired and an application was made to the Board for the approval of the station plans. These plans, however, could not be approved until the question of what grade the tracks should be on was determined.

The grade crossings at Yonge and Bay streets have been a source of very great danger and much annoyance on account of delays caused by the blocking of the crossings by passing trains, not only to the citizens of Toronto who visit the island and the water front during the summer months, but also the large passenger and freight traffic which goes to and from Toronto by boat during the months of water navigation. This danger and source of annoyance also exists at other grade crossings but not in as aggravated a form. Different methods have been suggested as to what would be the best solution of a situation which is generally recognized to be an intolerable one.

In November, 1907, a plan was submitted to the Board by the Toronto Board of Trade of a viaduct upon which four running tracks were carried at a height which would permit of the passage of vehicular traffic including trolley cars under these tracks on the different streets which run to the water front. This plan showed the commercial sidings and team loading tracks of the railways remaining at street grade.

A formal application was made to the Board some months later by the Municipal Council of the city of Toronto, for an order compelling the railways to raise all their tracks including commercial sidings and team loading tracks to a sufficient elevation to permit of free passage on the highways under the tracks as in the Board of Trade plan.

At the recent sitting of the Board in Toronto this viaduct scheme was strongly opposed by the railways on the grounds of excessive expense and the inconvenience it would cause to the railways and the shipping interests.

As an alternative proposition the railways suggested that bridges be built carrying the highways over the railway tracks. Such structures to be erected at the different streets leading to the water front as and when they became necessary in each particular case—the railways admitting that bridges should at once be built at Yonge and Bay streets. I think that as the railways will have to pay the major portion of the

expense of any scheme for the elimination of grade crossings at Toronto and in other ways have a very large interest in the method, whatever it may be, that is to be adopted to bring about this desired result, their scheme should receive our most serious consideration and their suggestions followed if it is not incompatible with the best interests of all concerned.

I have come to the conclusion, however, that in this case the plan of carrying the highways over the railways by bridges should not be adopted for any of the streets east of John street. Bridges at Bay, Yonge and the streets east of Yonge would not only prove excessively expensive because of the great quantity of filling that would have to be done in the Bay and the undoubtedly very great, but at present inestimable land damages at both their north and south ends which would have to be paid, but would be most injurious to the commercial industries along the water front and be inconvenient to every one having to use them.

The Railway Act requires bridges over railways to have a clearance of twenty-two feet six inches from the top of the rail to the bridge, but gives the Board power under special circumstances to reduce this space. It seems to me that if there ever are cases where the Board would be justified in departing from the principle adopted by parliament that bridges should be high enough to permit a man to stand on top of a box car and pass under the bridge with safety the Esplanade railway yard with the tremendous freight traffic both east and west is not one of such cases. If bridges were decided upon they would therefore have to have a clearance of 22 feet 6 inches; but the railways showed a clearance of from eighteen feet six inches to twenty feet on the bridge plans they submitted. Their idea in suggesting low bridges was, of course, to prevent the bridges extending too far north and south. But, even with a clearance of eighteen feet six inches, they had to show grades of about 4 per cent on the ramps to keep the bridges from crossing Front street on the north and extending some distance out in the bay on the south. In addition to the objection to the bridges on the ground of inability to have proper clearance or head room the grades on the ramps would be too steep. It was clearly established in evidence before us, that for satisfactory teaming the approaches to the bridges should not have a grade exceeding 3 per cent. As already indicated, such a grade could not be arranged.

I am, therefore, of the opinon that as grade separation for the streets east of John street cannot best be brought about by carrying the highways over the railways, that the other method, that of carrying the railways over the highways by viaduct, which to my mind will prove neither excessively expensive or inconvenient, should be adopted. I do not, however, concur in the city's suggestion that the commercial sidings and team loading tracks should be elevated. These might well be left on the street level within certain bounds to be used by moving cars or locomotives only between specified hours of the night. If the city's idea of elevated switches, team loading tracks and a roadway for vehicles were carried out, very great damage would be done to prominent commercial establishments and considerable inconvenience and loss of business would be experienced by a number of industrial concerns; and all for no purpose which could not be obtained in another way at practically no expense.

If four running tracks were elevated on a viaduct of a width of about 53 feet there would still be ample room on each side to take care of the commercial sidings and the team delivery tracks if the adjacent city property were utilized for the purpose. But a right of way should, of course, be maintained for teaming on Esplanade street and south of the viaduct for ingress and egress to all property on the water front. But as the chief evils to be cured are the grade crossings at Yonge and Bay streets, which are subject to be used by large numbers of people at all hours of the night and day, particularly during the summer months, I would prohibit the existence of any tracks across either of these streets at grade, and therefore all commercial tracks leading from the east would have to stop east of the east side of Yonge street. With regard to the limited use which might be made of these tracks I would suggest,

subject to further argument which might be addressed to the Board on this point, that cars or locomotives be not permitted to be moved on them except during the hours between 7 p.m. and 6 a.m., with the exception in the case of fruit or perishable merchandise which might be spotted on such tracks during the day if special precautions were taken to prevent accidents to persons using the street openings through the viaduct.

In addition to Yonge and Bay streets, I think York street, which should be produced to the water front at grade through a subway under the running tracks and the elevated station tracks, ought to be absolutely free from all grade crossings, as it would be much used not only by a large number of pedestrians but also by heavy teams from the Canadian Pacific Railway freight yard. I would therefore stop all tracks at grade from the west at the west side of York street. The John street bridge will have to be raised to give 22 feet 6 inches clear over the viaduct tracks and bridges over all tracks with the same clearance built at Spadina avenue and Bathurst street. The highway crossings on the Grand Trunk from Bathurst street to the Humber river are to be dealt with at a meeting of the Board in January next, but as all parties are agreed that the proper solution for the elimination of grade crossings on this line as far as the Sunnyside Crossing is the depression of the tracks from Bathurst street west, that matter need not interfere with the final determination of the question at present under consideration.

Having decided upon a viaduct, it follows, of course, that the new station must be elevated to the same grade as the viaduct. The location and details of the station are, I understand, generally satisfactory, but the best method of ingress and egress for vehicular traffic to and from the station could not be settled until the elevation of the tracks was determined.

The street openings in the viaduct should have fourteen feet clear head room and be of the full width of the street. The details of the plans and the general lay-out of the ground should be left to the railways to suggest when they submit plans for the approval of the Board.

I do not think the Board should now determine at what precise point the eastern end of the viaduct should be. It is sufficient, I think, for the Board to inform the railways at this juncture that Cherry street must be crossed overhead with a clearance of 14 feet. I say nothing at the moment as to the disposition of the Eastern avenue and Queen street crossings, east of the Don, as the Grand Trunk Railway have filed plans with the Board showing a line from the Don to Port Union following the lake shore, which would eliminate the Scarborough Heights grade. If this plan is gone on with and the new line constructed, the line over Eastern avenue and Queen street would doubtless be abandoned. The railway does not now run on Mill street, but if the construction of a viaduct would require the use of Mill street for railway purposes it should be so used, provided a right of way for vehicles was preserved on this highway.

I think the railways should be ordered to submit to the Board, within, say, sixty days from the date of the order, plans of a viaduct and bridges along the water front as far west as Bathurst street on the lines indicated. Copies of the plans should, of course, be sent to the city and then the Board should hold a sitting in Toronto, if necessary, when the details of the plan might be discussed, and if the Board is satisfied with them they could be finally approved and the railways ordered to commence construction.

Perhaps the most difficult point to determine in all this question is what is the fair and reasonable proportion of the cost of this work which should be contributed by the city of Toronto. We have had evidence of what has been done in other cities, but it has been of little assistance to us because circumstances differ so much in different cities. My own view is that as the proposed viaduct is going to prove such a benefit to Toronto that the city's contribution towards it should be substan-

tial. We must also bear in mind that the railways were permitted, if not induced by the city, to come into Toronto on the Esplanade level, and have spent very large sums of money in supplying terminals for Toronto. The railways will, of course, receive some benefits from a viaduct, such as being permitted to enter and leave the city at a much higher rate of speed than at present and be relieved of the constant danger of accidents at grade crossings, but these advantages will not be commensurate with the cost of elevating their tracks. I therefore think that Toronto should contribute one-third to the cost of a four-track viaduct, excluding the cost of tracks, ties and ballast, and one-third of the cost of the substructure necessary to elevate all tracks at the proposed new station.

It does not appear to me that land damages outside of those which may be suffered by the railways will be very great. If there are any such damages I think they should be settled by the city and the railways contribute two-thirds of the amount. With regard to damages suffered by the railways, I think they should be entirely paid by themselves. This will merely amount to an adjustment between the railways of each one's interests and losses in connection with the carrying out of the whole station and viaduct scheme. If the railways cannot adjust their difficulties between themselves the Board will do it for them as best it can at a later date.

The city will have to permit the laying of tracks or the construction of parts of the viaduct on city streets. I would not allow the city any compensation in such cases.

With regard to the bridges at John, Spadina and Bathurst streets, the city should pay one-third of their cost and be responsible for the maintenance of the sidewalks and roadway on them.

The entire cost of maintenance of the viaduct should be borne by the railways, but the city should maintain the roadway and sidewalks at street openings. Before an order is issued carrying out the board's decision in this matter, draft copies of such order should be sent to all parties interested and they should be given an opportunity to speak to it. Owing to the fact that the parties were so far apart in their respective submissions to the Board and as we were not favoured with argument at our recent sittings, there may be some matters of detail in the proposed order which might be changed or some points covered which may have been omitted.

McDougall and Secord v. Canadian Pacific Railway.

The applicants applied, under sections 26, 30 and 158 of the Railway Act, and such other provisions of the Act as were applicable, for an order declaring that the plan, profile and book of reference deposited by the Canadian Pacific Railway Company, as lessee of the Calgary and Edmonton Railway Company, in the Land Titles Office for the North Alberta Land Registration District, was not in accordance with the provisions of the Act, and that so far as the same affected certain lands named of the Hudson Bay Company's reserve, should be cancelled and annulled.

The application was heard at Edmonton on the 19th February, 1909, and at the conclusion of the hearing Chief Commissioner Mabee delivered the following oral judgment, which sufficiently sets forth the facts:—

This application brings up an important question of law, and if counsel for the railway company is right about it, it may as well be disposed of at once, so that if the view we take is erroneous we can be put right without delay.

This application affects lots 125 to 144 in block 10, and lots 41, 91 and 92 in block 9 of the Hudson Bay reserve. Now, in reference to the first series of lots in block 10, it seems before this application was launched bona fide steps were taken in order to ascertain the value of the property, so that the railway company might obtain title from the owners. Those proceedings were on foot, and it does not apear to us to be

a wise thing for us to interfere with those proceedings, and with respect to the lots in block 10, the application must be refused.

The situation is quite different with respect to the three lots in block 9. This plan has been registered upon these lots now since, I think it was said, 1906.

Mr. NEWELL.—The 26th of May, 1905.

Hon. Mr. MABEE.—1905 it is said; and since February or thereabouts in 1907 apparently no steps have been taken to negotiate with the owners of these three lots and fix the price that should be paid by the railway company upon taking title from the owners.

I do not know why steps were not taken to arbitrate with respect to the land in block 9 at the same time as proceedings were taken with respect to the lots in block 10. However, the fact is that no steps have been taken, and that during the past four years a cloud has rested upon these lands by the registration of this plan.

Now, the statute limits the compensation to be fixed in the event of the parties being unable to agree, and confines the arbitrators upon arbitration to the value of the land at the date of the registration of the plan.

It is contended by counsel for the railway company that under the statute authorizing the construction of the railway company, the railway company has a right to register plans upon the lands of private individuals, tie them up during the whole life of the charter without taking any steps to acquire title, and when steps are taken, then the land-owner is limited in compensation to the value of the lands at the date of the filing of the plans.

I do not understand that to be the law. If it is, the sooner it is found out to be the law the better for all concerned.

I think that under the Railway Act, where the Board has granted an order permitting registration, or approving of the plan, thereby permitting it to be registered, that there is clear authority under the amended section 29 of the Act of last year, which gives the Board power to review, rescind, change, alter or vary any order made by it.

Now, there was an order made by this Board approving of the location of this line through these three lots. It seems to me, if the language of the section means anything, it means that this Board may review that order, may rescind it, may change it, or may alter and vary it, and the conclusion we come to is that it will do equity between these parties to vary that order by rescinding the portion of it which located or approved of the line of location through these lots, 41, 91 and 92; and that will be the order of the Board.

If, on the other hand, the railway company is willing to let the compensation proceedings go ahead upon the basis of the present value, if that course is agreed to, no order need issue. If, however, that course is not agreed to, an order will go varying the former order by cancelling the location through these lots I have indicated.

Counsel for the railway company applied for leave to appeal to the Supreme Court of Canada from the judgment of the Board.

Held, by Chief Commissioner, that the question involved was one of jurisdiction, and that application for leave to appeal must therefore be obtained from a judge of the Supreme Court of Canada.

Complaint James Richardson & Sons.

The complainants, grain and commission merchants of Kingston, Ontario, complained to the Board that the railway companies unjustly discriminated against Kingston and in favour of Lake Huron and Georgian Bay ports, on shipments on western grain to points in Quebec and the maritime provinces, and applied for an order directing the said companies to file rates from Kingston and points in Quebec to the

maritime provinces similar to those which the said companies had established from Georgian Bay and Lake Huron ports.

The application was heard at Ottawa.

Judgment, Mr. Commissioner Mills, concurred in by Chief Commissioner Mabee and Assistant Chief Commissioner Scott, January 13, 1909:—

I think Mr. Richardson should be placed upon the same basis as other shippers of grain, &c., to the maritime provinces, that the rate charged to him should be such that he will be at no disadvantage at the various points at which grain, &c., is sold in the maritime provinces, that is, that the boat rate from Fort William to Kingston plus the rail rate from Kingston to various points in the maritime provinces should amount to the same sum as the boat rate from Fort William to Georgian Bay ports plus the rail rate from the said ports to the same points in the said provinces.

I think it is in the interests of the development of trade at various points in the country that Mr. Richardson and others like him east of Georgian Bay ports, unless very far east, should not be given any advantage nor be placed at any disadvantage in shipping from Fort William via Kingston elevators to points in the maritime provinces as compared with persons shipping from Fort William via Georgian Bay elevators to the same points in the maritime provinces.

The order of the Board, dated January 13, 1909, directed that the rates charged from Kingston by the Grand Trunk Railway Company, the Canadian Pacific and the Kingston and Pembroke Railway Companies on western grain arriving at Kingston by vessel and destined to points in Quebec and the maritime provinces, be made on the basis of seven cents per 100 pounds from Kingston to Montreal; and that the proportional or 'arbitrary' rates from Montreal to the said points in Quebec and the maritime provinces, be added to the said rate of 7 cents per 100 pounds from Kingston to Montreal, do not exceed the proportional or 'arbitrary' rates from Montreal in force concurrently on western grain transferred at Lake Huron ports.

The order further directed that the rate fixed by this order should become effective not later than February 18, 1909.

Thrift vs. New Westminster Southern Railway Company.

This matter was heard at the sittings of the Board held at Vancouver, February 25, 1909.

The facts are fully set forth in the judgment of the Chief Commissioner.

Chief Commissioner Mabee, March 15, 1909.

The New Westminster Southern was incorporated by an Act of the British Columbia Legislature, and has never been declared to be a work 'for the general advantage of Canada,' and objection was therefore taken that this railway is not under the control of, or within the jurisdiction of the Board of Railway Commissioners.

The road is operated by the Great Northern Railway. It was not shown that the New Westminster Southern had any rolling stock or equipment, or, so far as its operation was concerned, that it was in any way a separate concern from the Great Northern. The trains of the latter road between Seattle and Vancouver pass over the line of the New Westminster Southern, and it is the connecting link between the line of the Great Northern, in the State of Washington and Vancouver.

The Great Northern Railway, in so far as it operates in Canada, is subject to the jurisdiction of the Board. The New Westminster Southern connects with the former railway, and so falls within section 8 with respect to through traffic and all matters appertaining thereto. Subsection 21 of section 2 defines 'railway' as meaning any railway which the company has authority to construct or operate.

The situation, then, is that a railway company subject to the jurisdiction of the Board, is operating this provincial road, and the applicant asks that certain facilities shall be provided by the railway company at Hazelmere, in the province of

British Columbia. The request is that a platform be established so that passengers may disembark with safety from the Great Northern trains, and some small station building be provided as a means of shelter for travellers.

These are matters appertaining to through traffic upon this railway, and I am of opinion that to that extent the railway is under the jurisdiction of the Board. I think it also only reasonable that proper facilities should be provided at Hazelmere for the safety and convenience of the public using the trains of the Great Northern Railway. The station need not be an expensive affair, but the Great Northern Railway Company, I think, should provide a suitable platform and a building of moderate expense that may be used by travellers as a shelter, and also for the temporary storage of freight. The Great Northern Railway Company, whose counsel opposed the application, will be added parties.

The formal issue of the order may be delayed for 30 days if the Great Northern Railway Company desires to apply for leave to appeal upon the question of jurisdiction. If no appeal is taken, one of the Board's engineers may define the size of the platform and location, and size of the shelter as well as the location.

Re Interlockers.

Chief Commissioner Mabee:—The senior roads complain that under the practice heretofore in force, an unfair burden is placed upon them when leave is granted to a junior road to cross their right of way and tracks. The senior road is in possession of the field, and although it is necessary in the public interest that under proper conditions and at proper points, junior roads should have the privilege of crossing, yet it strikes one at the outset that such privilege should not carry with it any burdens upon the senior company, other than those absolutely necessary as incidental to the crossing. Where an interlocking plant is established, an additional man is required to operate it, and the practice has been for the senior company to appoint this man. This imposes upon the senior company some additional risk that cannot be avoided; there must be at times delays in operation; the crossing itself is an added peril, carrying with it dangers of collision and loss to the senior company, that it would not be subject to had the crossing not been permitted; but hitherto in most instances, I think in all cases where the Board has made crossing orders, the man in charge of the interlocker has been regarded as the employee of the senior company only, in which event if, through his carelessness or negligence, damages arose to the property or employees of the junior company recovery could be had against the senior company. This seems absurd. The senior company may resist to the utmost the application to cross; this may be forced upon it; then a careful and skilful man may be selected to operate the interlocker, but through some fault or lapse of his, a train on the junior road is derailed, and the senior company is held for all the damage. The injustice of the situation is apparent. Before the establishment of this Board, the companies were fairer than that to one another, and agreements were provided where the junior company recognized that it was unreasonable to impose upon the senior company the liabilities above pointed out.

When this application came up, I thought the electric railway companies should be notified; this was done, and their views were placed on record. The situation as to these roads is, I think, quite different from that of the steam roads. In most instances, where they cross steam railways, these crossings are upon public highways where neither company owns its right of way, but as to which each has an easement only; differences as to result in the event of collisions and many other matters that occur to one, make it necessary to eliminate all electric roads from the consideration of this application, and the conclusions arrived at will have an application to the steam roads only. It is quite impossible to say how matters would work out upon the whole if left as they now are; the older roads are continually building new lines,

which are junior to other trunk and branch lines, and I suppose all the roads have both senior and junior crossings at various places, but if the loss did in the end even up, it would be by accident only, and this is a risk that should not be permitted to continue.

The senior company, while appointing the man to operate the plant, recognizes the interest of the junior company in the selection, and the latter company should have the right to require his dismissal for cause.

It was suggested upon the argument that the junior company should be given the right to operate the plant; this, of course, would not be reasonable and would be an unjust interference with the property and franchise rights of the senior company.

In some existing agreements, the signalman or operator of the interlocker is called a 'joint employee.' Now if an accident happens upon the junior road, owing to the negligence of this signalman, and he is not a fellow servant of the trainman upon the junior road, it is likely their damages against the senior company would be measured in a different scale than if the signalman were a joint employee of both companies. These damages should be borne by the senior company, but should be thrown back upon the junior company, so this anomalous position would be the result. The junior company is paying all the expense of installing and operating a plant to protect its patrons, property and employees; the man in charge causes damage to the latter in permitting two trains to collide, and the junior company is compelled to compensate upon a common law basis, while if this same crossing is sanctioned by the Board without the installation of an interlocker, the employees of the junior road injured in a collision at the crossing might, in some cases, be without redress.

This signalmen, although selected by the senior company, is always paid by the junior company; he is performing services for both. Sometimes the greater services are rendered to the junior company; the latter can, under certain circumstances, call for his dismissal; why do not all these elements establish a joint service. The whole situation is an artificial one, arising through terms and conditions imposed by the Board in the interest of the safety of the public, the employees, and the preservation of the property of the railway companies. The senior company is forced, by the necessities of the junior company, to engage this extra man, and if it exercises care in the selection, it seems to me it discharges its duty to the junior company and should not be liable to the latter company for the negligence of the man engaged; it has in addition to bear its chance of loss by reason of the negligence of this man, forced upon it by the junior road. The senior company probably, in most instances, has the most at stake at new crossings, so the engagement of the signalman is left in good hands. The junior company should not be placed in a position where it might be held for greater damages because it is called upon to provide protection, than it would were it at liberty to cross without protection. Again, the junior company should not be subjected to liability upon a higher scale, because it is prevented from selecting the man it has to pay for operating the protective plant it has been compelled to install.

I think from every point of view, in fairness to both roads, this signalman should be regarded as a 'joint employee' of each, and that where one steam road applies for leave to cross another at grade, permission for such crossing should be given, where an interlocker is required to be installed, only upon condition that the companies place in charge of the interlocker a competent joint signalman, who shall be the joint employee of both companies, selected by the senior company and liable to dismissal for cause upon complaint or objection by the junior company, and that then each company shall be liable for all the loss or damage suffered or sustained on its own lines by its patrons or employees, or to its property, caused by the negligence of the joint signalman, and in no event shall the companies, as between themselves, be liable for any loss or damage of any nature or kind whatsoever happening upon the line or lines of the other, and caused by or arising from the negligence of such signalman.

It was understood that the conclusions arrived at in this matter should apply to all

interlockers ordered or established since October 1 last, but, of course, as to any in existence before that time, or as to those covered by agreements between the companies themselves, and continuing upon foot, these conditions will have no application.

If the interested parties desire to speak to the settlement of a permanent and settled form of conditions to go in these orders in the future, it may be taken up at the next meeting. It might be well to embody the conditions that appear in, I think two, former orders regarding interlockers, with those above indicated, so the whole interlocker provisions may appear in each order as it issues.

March 30, 1909.

Re Canadian Northern Railway and Don Valley Lands.

Argued 22nd April, 1908. Judgment 28th April, 1908.

Chief Commissioner Mabee.—My brother Commissioners heard this application before I became a member of the Board and were of the opinion, in so far as the facts were concerned, that the application should be granted. Some of the landowners, however, raised the objection that the proceedings did not fall within the provisions of section 178 of the Act.

This provides that should the company 'require.....more ample space than it possesses or may take under the last preceding section.....for the diversion of a highway, or for the substitution of one highway for another,..... it may apply to the Board for authority to take the same for such purposes without the consent of the owner.'

Subsection 4 provides that 'the Board may, in its discretion, and upon such terms and conditions as the Board deems expedient, authorize in writing the taking, for the said purposes, of the whole or any portion of the lands applied for.' This section is much wider than section 139 of the Railway Act, 1903, which did not contain the words relating to the diversion of a highway, or the substitution of one highway for another, nor was it clear that under subsection 2 of section 186, a highway could be expropriated and closed up.

The necessity for the railway taking the particular lands in question for the purposes set forth in the application has been sworn to by the engineer, as required by subsection 3 of section 178. At the hearing oral evidence was given to the same effect, and the Board's engineer has reported that, in his opinion, such necessity exists.

Objection was taken by Mr. Osler for some of the persons interested that the railway was endeavouring to expropriate these lands that it might convey them to the city of Toronto in substitution for certain lands the city was selling to the railway company, but a perusal of the agreement entered into between the railway company and the city shows that the lands the company is asking authority to take are to be used as a public highway in lieu of certain streets running through the lands covered by the agreement for sale entered into between the city and the railway company; and my brother Commissioners have found as a fact that the lands covered by this application are required that the highway or highways in question may be diverted. Objection was also taken that the railway company intended locating a railway yard upon the lands hitherto acquired by it and those it was purchasing from the city; but I do not think, upon this application, the Board has any power to prevent the location of a yard at the point in question, the only matter for determination being whether the lands applied for are necessary for the diversion of these highways. If they are, the section covers the application. Some of the landowners admitted they could not successfully oppose the application. It is true subsection 4 makes it discretionary with the Board. This discretion has been exercised by my brother Commissioners in favour of the applicant.

The railway company is not, however, necessarily entitled to locate the diverted or substituted highways as laid out upon the plan filed. The landowners are entitled to a voice in the new location, and if by reason of a change in such location the company is unable to obtain a conveyance of the lands covered by its agreement with the city, it necessarily follows that this application fails.

In the meantime the Board's engineer will, after conference with the interested parties, direct where these diverted or substituted highways shall run. Then, if the city is still willing to carry out its agreement, the company may have authority to take the lands necessary for the new highways, but full compensation must be paid to all landowners whose property is taken, not only for the value of the lands so taken, but also damages (if any) to the rest of the lands which may be injuriously affected by the location of a railway yard at the point in question, and generally by reason of the exercise of the powers conferred upon the company. If in the result the railway company takes lands from the owners affected for the purpose sought, the arbitrators may, in fixing compensation or in determining the costs of the arbitration, have regard to the landowners' cost of this application, and in the event of the railway company not acquiring the lands applied for, or any other lands from the owners affected by this application, then it should pay the landowners' cost of this application; in the latter event to be fixed by the secretary of the Board.

Judgment of Chief Commissioner Mabee, concurred in by Deputy Chief Commissioner Bernier and Commissioner Mills.

Re Bell Telephone and Windsor Hotel Agreement.

The only object in submitting this agreement for the purpose of obtaining the approval of the Board is that, for the term covered by the contract, the Bell Telephone Company may be lawfully entitled to exact the tolls provided for in the contract.

The result of the Board's unqualified approval would be, no matter how the situation might change in future years, that the telephone company would be entitled to enforce payment of the 10 per cent rate, as the contract provides, during the period of ten years.

By judgment of the Board, dated November 23, 1907, the contract was approved of subject to the following conditions:—

1. That the charge of ten cents for each connection had over any telephone thereby leased with the Montreal exchange subscribers of the telephone company should be subject to alteration at any time by the Board.

2. That any extension of the term of the agreement after the expiration of ten years should be subject to the approval of the Board.

This disposition of the matter was not satisfactory to the telephone company, and a hearing was afterwards had, at which much evidence was given.

I have gone over this testimony, and I am clearly of the opinion that the disposition of the matter made by the Board in November last was correct and proper. I see no reason why an unqualified approval of the contract should be given; and the order approving the contract should include the above conditions.

Ottawa, May 13, 1908.

APPENDIX E.

INFORMAL COMPLAINTS FILED WITH THE BOARD DURING THE YEAR ENDING MARCH 31, 1909.

608. Condition of the road-bed of the Caraquet Railway between Chatham and Shippigan, New Brunswick.

609. Blocking of farm crossing one mile south of Thornhill, Ontario, by Grand Trunk Railway trains being left standing on the track.

610. Train service furnished by Grand Trunk Railway Company in the Cayuga, Ontario, district.

611. Unreasonable delay by the Canadian Pacific Railway Company in the handling of live stock in Alberta, and discrimination in the matter of personal transportation.

612. Refusal of the Grand Trunk Railway Company and Wabash Railroad Company to issue passenger tickets to travel over portions of the Grand Trunk Railway line operated by both companies which are available on either company's trains.

613. Discrimination by the Canadian Northern Railway in favour of the city of Winnipeg, Manitoba, on shipments to points on the Regina branch of the Canadian Northern Railway via Regina through Brandon to Winnipeg, Manitoba.

614. Unprotected condition of the Grand Trunk Railway Company's crossing directly east of Grand Trunk station, Bowmanville, Ontario.

615. Excessive express charged by the Canadian Northern Express Company on a return 'C. O. D.' shipment from North Battleford, Saskatchewan, to Toronto, Ontario.

616. Delay in settlement by Canadian Pacific Railway Company for loss of carload of apples wrecked en route from Drumbo, Ontario, to Regina, Saskatchewan.

617. Excessive freight rates charged on cedar poles as compared with rates on lumber from Coe Hill to Toronto, Ontario.

618. Flooding of farm near Waterloo, Ontario, owing to the construction of the Guelph and Goderich Railway, and poor drainage provided.

619. Proposed increase in freight rates on ore shipments via Algoma Central and Hudson Bay Railway.

620. Advance in freight rates on timber and forest products by Grand Trunk Railway Company, contained in tariff 'C. F. 83,' 'C. R. C. No. E 1210,' issued at Montreal, Quebec, April 15, 1908, effective May 1, 1908.

621. Refusal of Canadian Pacific Railway Company to do certain work along right of way near Labelle, Quebec.

622. Delayed rebates by railways on ocean freight traffic.

623. Excessive freight rates charged by the Atlantic and Lake Superior Railway to and from Maria East, Quebec.

624. Excessive freight charges by Grand Trunk Railway Company on three cars of spruce lumber shipped from Whitney, Ontario, to Toronto, Ontario.

625. Loss of cattle on Canadian Pacific Railway near Ouimet, Ontario, and refusal of railway company to make settlement therefor, and to fence the right of way.

626. Rates and facilities of express companies on shipments of milk and cream.

627. Condition of trestle at the mouth of Stewart's brook, on the Atlantic and Lake Superior Railway at Ouimet, Ontario.

628. Excessive charge of Bell Telephone Company for long distance calls between Montreal and Quebec city, Quebec.

629. Condition of roadbed on the Midland Railway, Manitoba, between Portage la Prairie and the United States boundary.

630. Excessive freight rates charged by the Grand Trunk Railway Company on a small touring car from Washington, D.C., to Toronto, Ontario.

631. Loss in transit via Canadian Northern Railway of moveable parts belonging to a log hauling engine shipped from Eau Claire, Wis., to Prince Albert, Saskatchewan.

632. Alleged unhealthy and unsanitary condition of railway stations in general, affecting the health of telegraph operators and employees within the stations.

633. Unsatisfactory train service on Canadian Pacific Railway to and from Macoun, Saskatchewan.

634. Refusal of the Midland Railway Company of Manitoba to pay wages to men on construction work.

635. Delay in the transportation of freight shipments from Gananoque, Ontario, to Yarmouth, Nova Scotia.

636. Failure on part of Canadian Pacific Railway Company to fence right of way at quarter section, ½ lot 6, concession 3, township of Dorion, near Ouimet, Ontario.

637. Increasd freight rates on lumber shipments from Brule lake, Ontario, to Ottawa, Ontario.

638. Overcharge on shipment of binder and harrow from point in the United States to Drinkwater, Saskatchewan.

639. Excessive telephone rates charged by Bell Telephone on calls between Braeside, Ontario, and Malloch's Mill, Ontario.

640. Freight rates on cattle via Grand Trunk Railway Company from Black Rock, Ontario, to Lindsay, Ontario.

641. Failure of the Canadian Pacific Railway Company to fence right of way of west half lot 2, concession 4, and east half lot 2, concession 5, township of Dorion, Ouimet, Ontario.

642. Loss of eighty cords of wood near Campbellville, Ontario, from ignition by spark from passing engine of railway.

643. Freight rates on the Orford, Mountain and Canadian Pacific Railways on lumber and grain shipments, to and from Kingsbury, Quebec.

644. Failure of Canadian Pacific Railway Company to fence right of way at southwest quarter No. 13, range 8, west 1st meridian, township 8, Rathwell, Manitoba, causing damage to crops by cattle entering farm property.

645. Inadequate settlement by Canadian Pacific Railway Company for right of way, Wolseley-Reston branch, northeast quarter section No. 32, township 13, range 7, west of 2nd meridian.

646. Loss of trunk delivered to Dominion Transport Co., Toronto, June 22, 1907.

647. Use of stamp by railways at Montreal, Quebec, on bills of lading for cheese shipments. 'Owner's risk of weather. Some boxes broken.'

648. Condition of drainage on right of way of Canadian Pacific Railway at South Gower, Ontario.

649. Freight rates on salt from Kincardine, Ontario, on Michigan Central Railway to Lake Erie and Detroit River Railroad points.

650. Carriage of lumber shipments via Ontario, Belmont and Northern Railway.

651. Condition of drainage along right of way of Canadian Pacific Railway near Crookston, Ontario.

652. Overcharge on carload of oats via Canadian Pacific Railway to Westport, Ontario.

653. Train service and shipping facilities on Grand Trunk and Wabash Railroads at Middlemiss, London and St. Thomas, Ontario.

654. Excessive charges of Dominion Express Company on a box shipped from Birnie, Manitoba, to Strasburg, Saskatchewan.

655. Loss of one hundred acres of hay, one hundred and fifty fence posts at Cowley, Alberta, by fire started by passing engine of the Canadian Pacific Railway Company.

656. Excessive freight rates on coal charged by Canadian Northern Railway from Tabor, Alberta to Dalmeny, Saskatchewan.

657. Condition of approaches leading to tracks of Toronto, Hamilton and Buffalo Railway that cross concessions in township of Oakland, Ontario.

658. Width of road-bed and size of ditches provided in cuts in the Grand Trunk Pacific Railway in the province of Saskatchewan.

659. Freight rates on carbide and products from Shawinigan Falls to Sherbrooke, Quebec, and Sault Ste. Marie, Ontario.

660. Excessive switching charges of railways at Thorold, Ontario.

661. Unprotected state of the Canadian Northern Railway running through property in the vicinity of Makaroff, Manitoba.

662. Non-fencing of right of way of Canadian Northern Railway at the northeast quarter section 10-28-30, west of 1st meridian, near Togo, Saskatchewan.

663. Improper stock cars furnished by Michigan Central Railway for the shipment of hogs.

664. Freight rates charged by the Canadian Pacific Railway on cattle from Alberta points to Winnipeg, Manitoba.

665. Cattle killed along the right of way of the Canadian Pacific Railway near Canora, Saskatchewan, owing to non-fencing along the line of railway.

666. Overcharge on twelve cars of lumber from Arnprior, Ontario to Valleyfield, Quebec, via Grand Trunk Railway.

667. Condition of road-bed of the Canadian Pacific Railway in province of Alberta.

668. Condition of drainage along the right of way of the Grand Trunk Railway Company and Central Vermont Railway at lot No. 247, parish of St. Antoine de Longueuil, near St. Lambert, Quebec.

669. Unsatisfactory mail and train service on Canadian Pacific Railway to and from Midale, Saskatchewan.

670. Hours of labour of despatchers on Grand Trunk Railway District between Belleville and Brockville, Ontario.

671. Condition of Canadian Northern Railway from Dauphin, Manitoba, to the south bank of South Saskatchewan river.

672. Poor facilities provided by the Canadian Pacific Railway Company for the handling of hogs at Kenilworth, Ontario.

673. Excessive freight rates of Vancouver, Westminster and Yukon Railway on lumber shipped from Burnaby, British Columbia.

674. Excessive freight rates on shipments of sugar from Raymond, Alberta, via Canadian Pacific Railway and Alberta Railway and Irrigation Company.

675. Storage charges by Grand Trunk Railway on shipment of agricultural implements.

676. Freight rates charged by the Grand Trunk Railway on shipment of feed wheat from Girvin, Saskatchewan to Holstein, Ontario.

677. Excessive freight rates charged by Grand Trunk Railway on corn shipment from Chicago, Ill., via Chatham, to St. John, New Brunswick.

678. Poor train connections afforded by Grand Trunk Railway Company at Tilsonburg Junction, Ontario.

679. Insufficient car supply at Clinton, Ontario, for the movement of traffic to Oxbow, Saskatchewan.

680. Freight rates charged by the Canadian Pacific Railway Company from Montreal to Aylmer, Quebec.

681. Freight rates charged by the Canadian Northern Railway Company on ties in carloads to St. Boniface Transfer, Manitoba.

682. Overcharge on shipment of hay on the Grand Trunk Railway from Mitchell and Harley, Ontario to Timagami, Ontario.

683. Overcharge on car of hay shipped by Canadian Pacific Railway from West Monkton to Timigami, Ontario.

684. Freight rates charged by Grand Trunk and Canadian Pacific Railway Companies on corn shipments from Chicago via Chatham to St. John, New Brunswick.

685. Unsatisfactory train connections of Grand Trunk Railway at Tilsonburg and Tilsonburg Junction, Ontario.

686. Excessive switching charges on Michigan Central Railroad at St. Thomas, Ontario.

687. Condition of drainage along right of way of Canadian Northern Ontario Railway near Barne's Bale, Ontario.

688. Condition of road-bed on Canadian Northern Railway between Tisdale and Melfort, Saskatchewan.

689. Freight rates of Grand Trunk Railway on pulp wood shipment from Pembroke, Ontario to Fulton, New York.

690. Refusal of Quebec Central Railway Company to accept bill of lading at D'Israeli, Quebec, on shipment consigned to private siding.

691. Unsatisfactory train connection between Canadian Pacific Railway and Temiscouata Railway.

692. Loss of cattle killed on right of way of Canadian Northern Railway near Langham, Saskatchewan.

693. Passenger rates on Quebec Central Railway from Lake Megantic to Ste. Cecile, Quebec.

694. Dangerous condition of farm crossing on Grand Trunk Railway at lot No. 33 in the township of Seneca, Ontario.

695. Switching rates of Canadian Northern Railway at Port Arthur.

696. Condition of highway crossing on Canadian Pacific Railway, west of Mountain Station.

697. Freight rates charged by railways on ingot tin in less than carload lots from Montreal, Quebec to London and St. Thomas, Ontario.

698. Requirements of railways that mileage tickets be presented at ticket office in exchange for passage tickets.

699. Flooding of property in front of town of Girvin, Saskatchewan, owing to Canadian Pacific Railway Company not putting in culvert.

700. Failure of the Grand Trunk Pacific Railway Company to settle for expropriated lands required for right of way in Fort Rouge, Manitoba.

701. Failure of the Grand Trunk Railway Company to provide station near the crossing of the middle line in the township of Somerville, Ontario, in accordance with agreement.

702. Overcharge on shipments on the Canadian Northern Railway from Winnipeg to Ninette, Manitoba.

703. Failure of the Canadian Northern Railway to plank two crossings in the vicinity of Quill Lake, Saskatchewan.

704. Closing of telegraph office by Canadian Pacific Railway and Great Northwestern Telegraph Companies, Colborne, Ontario.

705. Shortage of grain, lost in transit over railways.

706. Overcharge on shipment of freight on the Canadian Pacific Railway from Edmonton, Alberta to Vancouver, British Columbia.

707. Failure of the Canadian Northern Railway to construct the Goose Lake branch in the province of Saskatchewan.

708. Damage to household furniture shipped by Canadian Pacific Railway from Edenland, Saskatchewan, to a point in Manitoba.

709. Loss in transit of 175 bushels of grain shipped by Canadian Pacific Railway from Gainsboro', Saskatchewan, to Fort William, Ontario, and refusal of railway to settle therefor.

710. Shortage in shipment of car of rye flour from Delhi, Ontario, to Montreal, Quebec. Also damage to goods caused by shunting.

711. Condition of crossing of Canadian Pacific Railway Company between town of Arcola and town site of Kisbey, Saskatchewan.

712. Condition of culvert on the Central Ontario Railway near Eldorado, Ontario.

713. Condition of road-bed of Canadian Northern Railway running through Melfort county, to Prince Albert, Saskatchewan.

714. Excessive rates of Grand Trunk Railway on shipment of oats from Kingston, Ontario, to Boston, Massachusetts, as compared with rates from Georgian Bay points.

715. Refusal of Canadian Pacific Railway to sell second class tickets from Dubuc, Saskatchewan, to Toronto, Ontario.

716. Excessive freight rates on the Lake Erie and Detroit Railway on shipment of salt from London, Ontario, to Clamworth, Ontario.

717. Refusal of the Grand Trunk Railway Company to allow commissions on tickets sold for excursions to Sarnia, Ontario.

718. Dangerous condition of the Canadian Pacific Railway at Duncan, British Columbia, and request that an automatic signal be provided.

719. Extra charge on Grand Trunk Railway Company for stop-over privilege on cheese shipments.

720. Failure of the Canadian Northern Railway Company to erect fence and put in proper crossings over ditches and gates at section 14-13-1 west.

721. Delay in delivery of shipment of nursery stock forwarded via Toronto, Hamilton and Buffalo Railway Company to St. Louis station, L'Islet county, Quebec.

722. Estimated weights charged on three head of cattle from Sussex, New Brunswick, to Perth, Ontario.

723. Dangerous condition of crossings of the Grand Trunk and Michigan Central Railroads in the town of Welland, Ontario.

724. Refusal of the Canadian Northern Quebec Railway to put its rails on a level with the streets and to build sidewalks at the crossings in the town of Masionneuve, Quebec.

725. Excessive freight charges on Grand Trunk Railway on green salted hides from Montreal to St. Catharines, Ontario.

726. Delay in construction of Canadian Northern Railway Dalmeny-Carlton extension.

727. Closing of certain streets in the town of Alliston, Ontario.

728. Condition of road leading to freight station of the Canadian Pacific Railway, and damage to goods on account of station platform being too high.

729. Accommodation afforded to the public by the Canadian Pacific Railway Company on the Macleod branch.

730. Length of hours of conductors on the Grand Trunk Pacific Railway, west of Portage la Prairie, Manitoba.

731. Failure of Canadian Pacific Railway Company to establish freight rates to and from Fry's station, Saskatchewan, to stations between Antlers and Redvers.

732. Running of trains by the Canadian Pacific Railway Company without proper inspection from divisional points in the west.

733. Construction of St. Mary's and Western Ontario Railway through lands of property owners at St. Mary's, Ontario, without authority.

734. Dangerous condition of crossing at Canadian Pacific Railway at station at Mission Junction, British Columbia.

735. Running of trains by Canadian Pacific Railway without proper inspection at terminals, and engines without proper braking appliances.

736. Excessive freight rates of the Great Northern Railway on shipments of cedar poles from Creston, British Columbia.

737. Overcharge on shipments of hardwood lumber via Canadian Pacific Railway Company from St. Agathe and Lachute, Quebec.

738. Inefficient train service on Canadian Northern Quebec Railway between Quebec and Montreal; also poor station accommodation at Garneau, Heronville rand St. Tite, Quebec.

739. Delay in delivery of shipment of spruce seedlings forwarded by the Canadian Pacific Railway Company from Grenfell, Saskatchewan, to Strasburg, Saskatchewan.

740. Excessive whistling of engines on Canadian Pacific Railway at night between Quebec station and Dorchester street, Quebec.

741. Excessive freight rates of Grand Trunk and Canadian Pacific Railway Companies on grain shipments from Kingston, Ontario, to New Brunswick and Nova Scotia points, as compared with rates from Georgian bay.

742. Excessive noise caused by operation of moving cars and engines on the Grand Trunk, Canadian Pacific and Ottawa and New York Railways at Ottawa, Ontario.

743. Dangerous railway crossing of Grand Trunk and Kingston and Pembroke Railways opposite barracks at Kingston, Ontario.

744. Excessive passenger rates charged by the Windsor, Essex and Lake Shore Rapid Railway Company.

745. Refusal of the Pere Marquette Railway Company to carry passengers on way-freight trains.

746. Condition of trains and accommodation of stations on the Canadian Northern Quebec Railway between Maisonneuve and St. Paul l'Ermite, Quebec.

747. Dangerous condition of road-bed and rolling stock Grand Valley Electric Railway between Brantford and Galt, Ontario.

748. Condition of the Canadian Northern Ontario Railway bridges between Rainy River and Port Arthur, Ontario.

749. Failure of the Canadian Pacific Railway Company to construct its line between Hardisty and eastern boundary of Alberta.

750. Dangerous points on Brennan's siding, Grand Trunk Railway Company, position of electric light poles on northwest corner of Kelly street and Ferguson avenue, Hamilton, Ontario.

751. Running of Canadian Pacific Railway Company's trains in and out of Vancouver, British Columbia, without proper inspection.

752. Unsatisfactory mail service on Canadian Northern Railway between Neepawa and McCreary, Manitoba.

753. Dangerous condition of road-bed of the Central Vermont Railway.

754. Train service of the Grand Trunk Railway Company on Port Perry and Whitby branch.

755. Non-fencing of right of way of the Canadian Northern Railway near Eldon, Manitoba.

756. Fencing of road allowance between concessions 2 and 3 in township of Tay, east of Midland, Ontario, by Grand Trunk Railway.

757. Condition of culvert on the Canadian Northern Ontario Railway near James Bay Junction, Ontario.

758. Excessive whistling of trains by Canadian Pacific Railway Company's engines at Almonte, Ontario.

759. Loss of cattle on the Canadian Pacific Railway near Cowley, Alberta, from inefficient cattle guards.

760. Unsatisfactory drainage on the Canadian Pacific Railway at Louisville, Quebec.

761. Condition of passenger coaches on the Ottawa and New York Railway.

762. Condition of highway crossings of Canadian Pacific, Grand Trunk and Canadian Northern Ontario Railway Companies in township of Foley, Ontario.

763. Condition of culvert on Grand Trunk Railway at lot 20, township of London, Ontario.

764. Refusal of Grand Trunk Railway to refund overcharge on shipment of lumber from Toronto, Ontario.

765. Treatment accorded passengers by conductor on Grand Trunk Railway train No. 33, from London, September 15, 1908.

766. Excessive freight charges by Canadian Pacific Railway on shipment from Frankfort, Ontario, to Montreal, Quebec.

767. Dangerous condition of roadway on Canadian Pacific Railway near Dominion Copper Company's smelter, Boundary Falls, British Columbia.

768. Order issued by the Grand Trunk Railway Company that train No. 1 shall not stop at Thousand Island station junction, Ontario.

769. Excessive freight rates of the Canadian Northern Quebec Railway, Quebec, Lake St. John Railway Companies on a through shipment.

770. Refusal of the Canadian Pacific Railway Company to make an allowance for breakage of goods in transit.

771. Condition of farm undercrossing of Canadian Pacific Railway Company at lot No. 19, concession 2, township of London, Ontario.

772. Excessive delay of railway companies in repayment to shippers of grain for lumber supplied for car doors.

773. Loss of shipment of household effects from Spokane, Washington, to Claresholm, Alberta. via Intercolonial Railway.

774. Excessive freight rates charged by the Canadian Pacific Railway Company on shipments of grain to and from Guernsey, Saskatchewan, to the terminal elevators on the great lakes.

775. Crossings of the Canadian Northern Railway, Oak Point branch at Warren, Ontario.

776. Inability of residents of Wainwright, Alberta, to transmit messages over telegraph wires of the Grand Trunk Pacific Railway.

777. Excessive freight rates charged on Canadian Pacific Railway on pulpwood from St. Stephens to Milltown, New Brunswick.

778. Excessive charges of the Dominion Express Company in Winnipeg, Manitoba, for the carriage of newspapers.

779. Drainage of right of way of Canadian Pacific Railway Company through farm near the village of Portneuf, Quebec.

780. Condition of farm crossing on Canadian Northern Quebec Railway in village of Portneuf, Quebec.

781. Dangerous condition of crossing on the Grand Trunk Railway near Fergus, Ontario.

782. Condition of highway crossing on the Thessalon and Northern Railway, east of road in township of Thessalon, Ontario.

783. Freight rates on sand and gravel from York to Toronto, Ontario, via Grand Trunk Railway.

784. Delay in delivery by railways of shipments of coal at Elstow, Saskatchewan.

785. Failure of the Canadian Northern Railway to erect fences on southwest quarter, section 13 township of Morley, Rainy River district, Ontario.

786. Insufficient supply of cars by railways for the movement of wheat from Redvers, Saskatchewan.

787. Refusal of Grand Trunk Railway Company to rectify error in billing a car of coal to Toronto, Ontario.

788. Closing by Canadian Pacific Railway Company of certain streets in the village of Coteau Junction, Quebec.

789. Failure of the Brandon, Saskatchewan and Hudson Bay Railway to fence the right of way opposite farm property at Wakopa, Manitoba.

790. Overcharge of $4.95 on shipment of brick from St. Polycarpe to Dorval, Quebec, by Canadian Pacific Railway Company.

791. Construction of Grand Trunk Pacific Company across property in Hurry, Alberta, severing six to ten acres and making a deep cut through the property and throwing waste dirt over the adjoining land.

792. Overcharge of $18 (eighteen) on shipment of dog by Dominion Express Co., from Winnipeg, Manitoba to Sudbury, Ontario.

793. Failure of the Brandon, Saskatchewan and Hudson Bay Railway to fence the right of way on northeast quarter section No. 13-4-20, Manitoba.

794. Construction by Canadian Pacific Railway Company of wagon road across property at Strathcona, Alberta.

795. Excessive freight rates charged by the Canadian Pacific Railway Company on shipment of pulpwood from Corbeil to Hawkesbury, Ontario.

796. Dangerous condition of public crossing of Canadian Pacific Railway Company at the town line beween South Gower and Oxford, Ontario; also unsatisfactory condition of farm crossing.

797. Excessive freight rates on shipments of fence wire from Portage la Prairie, Manitoba.

798. Dangerous crossing of Canadian Pacific Railway Company at range 27, mile 85.5 in the town of Claresholm, Alberta.

799. Excessive freight charges by the Canadian Pacific Railway and Canadian Northern Railway Companies on bulkhead cars of grain from western points to Port Arthur and Fort William, Ontario.

800. Damage to property by the Central Ontario Railway and removal of material without the consent of the owner at Maynooth, Ontario.

801. Injury to horse at public crossing at Forest Station, Manitoba, on the Grand Trunk Pacific Railway.

802. Stop-over charge of the Grand Trunk Pacific and Canadian Pacific Railway Companies at Sarnia tunnel on lumber shipments.

803. Damages to property at St. Paulin, Quebec, by diverting of water course by the Canadian Northern Quebec Railway Company.

804. Freight rates charged by the Canadian Pacific Railway Company on shipments of grain to Montreal and New Brunswick points.

805. Inability of industry at Kemptville, Ont., to recover from Canadian Pacific Railway Company money paid out by parties in regard to private sidings.

806. Shunting on the Hamilton Railroad by London and Port Stanley Railway Company, operated by the Pere Marquette Railway Company.

807. Failure of the Canadian Northern Railway Company to fence right of way through section 32-19-21 west 2nd meridian, near Lumsden, Saskatchewan.

808. Closing of crossing near village of Nashville, Ontario, by Canadian Pacific Railway Company.

809. Shortage in delivery on shipment of household goods forwarded by the Canadian Northern, Canadian Pacific and Grand Trunk Railway Companies from Rainy River to Gravenhurst, Ontario.

810. Failure of the Canadian Pacific Railway Company to move grain shipment from Grannan, Alberta.

811. Proposed closing of station on Canadian Northern Railway at Borden, Saskatchewan.

812. Failure of the Canadian Northern Railway Company to fence its right of way at the northeast quarter section No. 21, township 19, range 21, west 2nd meridian.

813. Insufficient car supply by the Canadian Pacific Railway Company for the movement of traffic from Glenboro, Manitoba.

814. Excessive passenger rates on the Canadian Pacific Railway between Hanover and Walkerton, Ontario.

815. Inadequate car supply by Canadian Pacific Railway Company for movement of grain from Belle Plains, Saskatchewan.

816. Refusal of the Canadian Northern Railway to pay for lands taken for right of way at Blackfoot Hill, Alberta.

817. Refusal of the Canadian Pacific Railway to permit third party to use private siding at Outremont, Quebec.

818. Failure of the Canadian Pacific Railway Company to pay for lands taken at Brookdale, Manitoba, for the construction of McGregor-Varcoe branch.

819. Condition of drainage on the right of way of the Guelph and Goderich Railway through lot 4, concession 9, township of Morris, Ontario.

820. Change of time table on Halifax and Southwestern Railway between Middleton and Bridgewater, Nova Scotia.

821. Delay by Canadian Northern Railway Company in constructing and opening for traffic of Goose Lake branch.

822. Restriction placed by the Dominion Express Company on the carriage of furs to Great Britain by charging excessive express rates for insurance of goods.

823. Failure of the Canadian Northern Ontario Railway Company to provide drainage to carry off surface water opposite lots 28 and 29, concession 6, township of McDougal, Ontario.

824. Condition of fences, station accommodation for the handling of express and freight, also lack of an agent at Fruitvale, British Columbia, on the Great Northern Railway.

825. Insufficient car supply by Canadian Pacific Railway for the movement of traffic at Parkland, Alberta.

826. Refusal of the Grand Trunk Railway Company to permit installation of telephones in passenger and freight stations at certain stations in province of Quebec.

827. Hours of duty of trainmen employed on the Canadian Northern Ontario Railway, Rainy River district.

828. Reduction of train service between Bannockburn and Tweed, Ontario, on Bay of Quinté Railway.

829. Inadequate car supply for the movement of live stock on the Canadian Pacific Railway Company from Cowley, Alberta.

830. Excessive freight rates and minimum carload weight on fruit shipments from Peachland, British Columbia, to Victoria, British Columbia, on the Canadian Pacific Railway.

831. Condition of swing bridge on the Grand Trunk Railway over Galops canal in the village of Cardinal, Ontario.

832. Inadequate car supply by the Canadian Pacific Railway Company at Frys and Antlers stations, Saskatchewan.

833. Damage in transit to household effects shipped by the Canadian Pacific Railway Company from Worcester, Massachusetts, to Moosejaw, Saskatchewan.

834. Inadequate facilities for the reception of freight and express matter at Beloeil, Quebec.

835. Condition of drainage on the Quebec, Montreal and Southern Railway near Picton to Smith's Falls, Ontario.

836. Stop-over charge on the Canadian Pacific Railway Company at Cartier, Ontario.

837. Excessive rates on the Canadian Pacific Railway on shipment of apples from Picton to Smith's Falls, Ontario.

838. Excessive rates charged by the Grand Trunk for switching of car of soft coal at Hagersville, Ontario.

839. Refusal of the Canadian Pacific Railway Company at Kamloops, British Columbia, to carry trunk as freight unless boxed.

840. Excessive charges of the express companies in western provinces.

841. Overcharge amounting to $884.01 collected by the Grand Trunk Railway Company on a shipment of sand and gravel from Niagara Falls to Welland, Ontario.

842. Dangerous condition of crossing on the Canadian Pacific Railway in the township of Bentinck, county of Grey, at 2nd concession.

843. Damage by the Central Ontario Railway to property at Maynooth, Ontario, by fire.

844. Excessive rates charged by the Canadian Northern Railway for warehousing carload of wheat consigned to Port Arthur, Ontario.

845. Objections to plan of proposed subway on the Grand Trunk Pacific Railway at highway crossing, northeast quarter of 15-53-24 W. 4.

846. Poor train service on the Canadian Pacific Railway to and from Mayook, British Columbia.

847. Loss in shipment of photo tent forwarded via Canadian Northern Express Company from Lanigan to Battleford, Saskatchewan.

848. Loss of four horses on right of way of the Canadian Pacific Railway Company at Arcola, Saskatchewan.

849. Dangerous condition of Canadian Pacific Railway crossing Main street, Hamilton street, Kenora, Ontario.

850. Misleading information furnished by the Canadian Pacific Railway Company's agent at Lyleton and Brandon, Manitoba, to travelling public.

851. Freight rates on ore shipments by Grand Trunk Railway in favour of United States smelters.

852. Extra charge levied by Dominion Express Company on returned empty lobster cans between Detroit and Atlantic coast points.

853. Delay in delivery of freight shipments at Cobalt, Ontario, and British Columbia points.

854. Failure of the Canadian Northern Railway to make settlement for property taken for railway purposes at township 33, range 10, section 16, west third meridian, near Tessier, Saskatchewan.

855. Freight rates of Canadian Pacific Railway Company on oats to points on the Toronto, Sudbury branch and main line Bisco to North Bay, Ontario.

856. Placing of power wires across tracks of the Canaian Pacific Railway in the vicinity of Lachine canal swing bridge without authority of board.

857. Damage caused by delay in delivery of shipment of baggage by Canadian Pacific Railway to Vancouver, British Columbia.

858. Failure of the Thousand Islands Railway to deliver consignment of bolts shipped from Gananoque, Ontario, to the National Transcontinental Railway at Cochrane on the Temiscouta and Northern Ontario Railway.

859. Excessive freight rates charged by the Canadian Pacific Railway companies on cartons shipped from Trois Rivières, Quebec, to St. John, New Brunswick.

860. Excessive rates charged by express companies on shipment of fresh fish from Meaford to London, as compared with the rates from Meaford to Toronto, Ontario.

861. Loss sustained by shippers on goods forwarded from Edmonton, Alberta, to flag station on the Canadian Northern Railway near Brudenheim, Alberta.

862. Taking up of planking by the Grand Trunk Railway Company from farm crossing known as the east half lot 43, 6th concession, County Wainfleet.

863. Dangerous and non-protected highway crossing in the vicinity of Swift Current, Saskatchewan.

864. Rates on shipment of freight from Detroit, Michigan to Western Ontario points, as covered by tariff E. 874 effective September 15, 1908.

865. Removal of agent by Canadian Pacific Railway from Kelloe, Manitoba.

866. Increased rates on the Canadian Pacific Railway on bricks, C. L., Casselman, Ontario to Montreal, Quebec.

867. Poor train service of Canadian Pacific Railway between Lauder and Tilston, Manitoba.

868. Condition of the approaches to the wharf at North Bay, Ontario.

869. Delay in running of trains of the Canadian Pacific Railway on the North Shore branch between Montreal, Quebec and Ottawa, Ontario.

870. Overcharge on shipment of settlers' effects forwarded via Canadian Pacific Railway from Mount Forest, Ontario, to Moosejaw, Saskatchewan.

871. Discontinuance by railways of service of heated cars from points in the province of Quebec in the winter months for the shipment of perishable goods.

872. Condition of highway crossing and lack of sufficient number of crossings, District of Nutana, Saskatchewan, on the Canadian Northern Railway.

873. Excessive express charges on shipments of cream to Montreal, Quebec.

874. Inadequate car supply for the shipment of grain from Weyburn, Saskatchewan.

875. Inadequate car supply by railways in Alberta for the movement of hay and grain shipments.

876. Failure of the Canadian Northern Railway to compensate for lands taken for right-of-way over southwestern section 37-27-29, near Dauphin, Manitoba.

877. Condition of fire guards and defective equipment of locomotives on railways in the western provinces.

878. Switching charges on the Grand Trunk Railway at Milton, Ontario.

879. Switching charges on the Canadian Pacific Railway on goods from steamship at West St. John to industries at a distance of $4\frac{3}{4}$ miles.

880. Crossing of the Canadian Pacific Railway at Mill street in the town of Enderby, British Columbia.

881. Inadequate train service Quebec, Montreal and Southern Railway between Longueuil and Montreal, Quebec.

882. Inadequate culvert on the Canadian Pacific Railway near Allan Park, Ontario.

883. Erection of fences on southern portion of land at Iberville Junction, Quebec, by Canadian Pacific Railway, causing accumulation of snow.

884. Poor accommodation and lighting of cars on the Quebec Railway Light and Power Company, to St. Joachims, Quebec.

885. Excessive rates charged by the Canadian Pacific Railway and Canadian Northern Ontario Railway Companies on car of lumber from Parry Sound to Ingersoll, Ontario.

886. Loss on two head of cattle on the Canadian Pacific Railway near Fordwich, Ontario, owing to inefficient cattle guards.

887. Placing of telephone wires across tracks of the Grand Trunk Pacific Railway by the municipalities of Miniota and Hamiota, Manitoba, without the authority of the Board.

888. Excessive freight rates charged by the Dominion Atlantic Railway and Steamship Company on live lobsters from Yarmouth, Nova Scotia, to Boston, Massachusetts.

889. Overcharge by the Grand Trunk Railway Company on shipment of lumber from Cache bay to Oakville, Ontario.

890. Condition of fences along right of way of railways near Ashville, Manitoba.

891. Overweight on shipment of hay by the Canadian Pacific and Grand Trunk Railway Companies from Seaforth, Ontario.

892. Excessive charges and inefficient service by express companies on shipments of fish from Wheatley, Ontario, to New York city.

893. Excessive freight rates by Canadian Pacific Railway Company on car of horses from Pincher Creek, Alberta, to Spokane, Washington.

894. Freight rates charged by railways on corn shipments from Chatham, Ontario.

895. Excessive freight rates charged by Ottawa and New York Railway Company on shipments of drugs and tea to Newington, Ontario.

896. Proposed increase by express companies in the charges for returned empty cases to Arnprior, Ontario.

897. Practice of Grand Trunk Railway Company of removing planking at farm crossing near Cayuga, Ontario, during winter months.

898. Removal of planking on Canadian Pacific Railway on the Souris branch in the municipality of Oakland, Manitoba.

899. Excessive freight rates charged by the Pere Marquette Railway on milk shipment from Harrow to Windsor, Ontario.

900. Inadequate car supply by the Canadian Pacific Railway Company on shipments of grain from Belleplains, Saskatchewan.

901. Irregularity in freight and passenger rates on the Vancouver, Victoria and Eastern Railway Company involving unjust discrimination in favour of points in state of Washington.

902. Inadequate car supply of stock cars for the movement of stock shipments by railways in Alberta, and refusal to supply planks to spike across doorway of such cars.

903. Poor accommodation furnished by the Grand Trunk Railway on trains to and from Hawkesbury, Ontario.

904. Failure of the Canadian Pacific Railway to provide station agent or operator at Hirsch, Saskatchewan.

905. Failure of the Canadian Northern Quebec Railway to keep open the station at St. Cuthbert, Quebec, for the arrival and departure of trains.

906. Excessive freight rates on Canadian Pacific Railway in the district of Sunbury, New Brunswick.

907. Length of hours of railway employees on the Canadian Pacific Railway in Alberta.

908. Negligence of the Canadian Northern Railway Company to provide suitable crossing fences and cattle guards on its Winnipegosis and Swan River sections.

909. Complaint about the Grand Trunk Company's siding crossing the highway at Caledon east, in the township of Albion, Ontario.

910. Rates on the Vancouver, Victoria and Eastern Railway on shipments to points in Manitoba.

911. Additional charges by Dominion and Canadian Express Companies on shipments to residents of Ossington, Concord and Deleware avenues and government road, Toronto, Ontario.

912. Refusal of Eastern Canadian Passenger Association to grant special rates in connection with the Montreal carnival of winter sports.

913. Overcharge by the Canadian Pacific Railway Company on shipment of Percheron stallion from Minnesota Transfer to Gleichen, Alberta.

914. Overcharge of freight on tank cars of oil on which railway companies have refused to give through rate from Philadelphia, Pennsylvania, to Toronto, Ontario.

915. Excessive express rates and inadequate connection between competing lines of railway in Muskoka district.

916. Limit of liability of railways on shipments of racing horses.

917. Express rates charged on shipment to and from Port Arthur, Ontario.

918. Express rates on shipment of fish from Nipigon Bay, Ontario.

919. Long hours of express messengers and other employees of express companies.

920. Alleged discrimination in rates by express companies on shipments of printed matter from Toronto, Ontario.

921. Express rates on fruit shipments from Burford, Ontario.

922. Express rates on shipment to and from Kenora, Ontario.

923. Proposed increase in express rates on returned empties to Sudbury, Ontario, from January 1, 1909.

924. Express rates charged on shipment to and from Clarksburg, Ontario.

925. Express rates on shipment to and from Halifax, Nova Scotia.

926. Increased rates by express companies on returned empties to Toronto, Ontario.

927. Failure of the Canadian Northern Railway to fence right of way northwest quarter section 26-19-22 west 2nd meridian.

928. Danger to the public and train crews on railways through the use of ordinary snow ploughs on engines.

929. Transportation facilities afforded by railways for the movement of live stock in Alberta.

930. Rates of the Canadian Express Company on shipment from Charing Cross, Ontario, to Blairmore, Ontario.

931. Loss of cattle on right of way Canadian Northern Railway near Scarth, Manitoba, and erection by the company of a snow fence in that district.

932. Loss of lumber shipped via Canadian Pacific Railway from Irish Creek to Chesterville, Ontario.

933. Freight rates charged by the Atlantic and Lake Superior Railway on shipment from Point Levis to Caplan, Ontario.

934. Freight rates charged by the Michigan Central Railroad on shipments of hogs from Alviston and Brigden, Ontario, to Ingersoll, Ontario, as compared with the rates to Toronto, Ontario.

935. Closing of the station at Osage, Saskatchewan, by the Canadian Pacific Railway.

936. Unsatisfactory condition in regard to the shipment of perishable goods by the Canadian Northern Railway during the winter months from Prince Albert, Saskatchewan.

937. Express charges on shipments of fruit and vegetables from Leamington, Ontario.

938. Excessive rates charged on balate and crude rubber to Montreal, Quebec.

939. Extension of time allowed the Canadian Pacific Railway for the construction and completion of its line to Dauphin, Manitoba.

940. Delivery service of the Canadian Northern Telegraph Company on a message to Prince Albert, Saskatchewan.

941. Non-protected condition of the Canadian Pacific Railway, and defective state of fences in the vicinity of Limbreck, Alberta.

942. Inadequate train service of the Canadian Pacific Railway to and from Erindale, Ontario.

943. Flooding of lands near Zephyr, Ontario, from inadequate drainage provided by the Canadian Northern Ontario Railway.

944. Unsatisfactory classification for shipment of cheese box stock.

945. Insufficient protection provided by the Canadian Pacific Railway in the matter of cattle guards in the District of Sapparton, British Columbia.

946. Poor service furnished by the Canadian Pacific Railway over spur tracks in vicinity of Estevan, Saskatchewan.

947. Inadequate protection of level crossing in the township of Brantford, Ontario.

948. Abrupt changes made by railways in long standing rates and regulations generally.

949. Excessive rates of the Pere Marquette Railroad on shipments of beet sugar from Wallaceburg, Ontario, to St. Paul, Minnesota.

950. Excessive freight rates on the Intercolonial Railway on consignment of castings from Sackville to St. John, New Brunswick.

951. Failure of the Canadian Pacific Railway and Canadian Northern Railway, to employ sufficient operators for the operation of trains in the west.

952. Overcharge on tow boats shipped from South Temiskaming, Ontario to Latchford, Ontario, by the Canadian Pacific Railway.

953. Excessive freight rates on the Quebec, Montreal and Southern Railway on shipments of stone from Mount Johnson and Stanstead, Quebec.

954. Train service of the Canadian Pacific Railway between Smith's Falls and Vaudreuil, Quebec.

955. Train service of the Canadian Pacific Railway between Dixie, Ontario and Toronto, Ontario.

956. Loss of cattle on Canadian Pacific Railway right of way near Barnet, British Columbia, on account of fences being down.

957. Excessive freight rates of the Atlantic and Lake Superior Railway, from Caplan Station, Quebec to Meguacha Point, Quebec.

958. Refusal of railways to supply box cars for shipment of pulpwood in the Eastern Townships.

959. Inadequate arrangements by the Dominion Express Company for the handling of express traffic at Cobalt, Ontario.

960. Construction of fences along right of way of the Pere Marquette Railroad in the township of Raleigh, Ontario.

961. Excessive freight rates charged by the Grand Trunk Railway on salt shipments from Windsor to Kingston, Ontario.

962. Excessive express rates on shipments between points in the maritime provinces.

963. Equipment of suburban railways in the vicinity of Hamilton, Ontario.

964. Overcharge by the Canadian Pacific Railway on consignment of imported liquor from Fort William, Ontario, to Winnipeg, Manitoba.

965. Train service of the Canadian Pacific Railway at Sharbot Lake, Ontario.

966. Excessive freight rates, lack of fences and inadequate cattle guards on the right of way of the Canadian Pacific Railway in the province of Alberta.

967. Excessive freight rates of the Atlantic, Quebec and Western Railway on shipment of car machinery from St. Hyacinthe to Caplan, Quebec.

968. Dangerous condition of crossing on the Grand Trunk Railway, known as the Carrington road, just west of Belleville station, Ontario.

969. Dangerous condition of crossing on the Grand Trunk Railway in the village of Burlington, Ontario.

970. Obstruction of water course by the Grand Trunk Railway in the vicinity of Grenfell, Saskatchewan.

971. Operation of Montreal Park and Island Railway line in Mount Royal ward, Montreal, Quebec.

972. Proposed increase of freight rates by railways on sad irons.

973. Proposed location of the Canadian Pacific Railway between Coldwater and Peterborough, Ontario, and station at Brechin, Ontario.

974. Shortage in shipment of two cars of coal to Guelph, Ontario, via the Grand Trunk Railway.

975. Failure of the North American Telegraph Company to furnish connections and agreement to interchange of telephone business at Hopetown, Ontario.

976. Condition of drainage of the Grand Trunk Railway in the township of Ops, Ontario.

977. Overcharge by the Grand Trunk Railway on consignment of eggs to Montreal, Quebec.

978. Inadequate telephone service in the township of Govan and the township of South Monaghan, Ontario.

979. Condition in and around the station of the Canadian Pacific Railway at Canmore, Alberta.

980. Loss of oxen through non-erection of fences on the right of way of the Canadian Northern Railway opposite section 23, township 38, range 26, west of the second meridian, near Dana, Saskatchewan.

981. Express rates of the Canadian Northern Express Company on shipment from Winnipeg, Manitoba, to Lumsden, Saskatchewan.

982. Loss to shippers of live stock in the province of Alberta, through alleged irregularities, difficulties and uncertainties connected with transportation of live stock in the west.

983. Refusal of the Canadian Pacific Railway to allow meat shippers at Calgary, Alberta, to make shipments to other provinces.

984. Railway facilities in and out of Simcoe, Ontario.

985. Proposed location of Esquimault and Nanaimo Railway on lot 127, Comox district, British Columbia.

986. Express rates on calcium carbide by Canadian and Dominion Express Companies from St. Catharines to Massey, Ontario.

987. Excessive freight rates on hay, grain, straw and farm produce via Great Northern Railway in eastern British Columbia.

988. Excessive freight rates of the Canadian Pacific Railway on shipment of horses from St. John, New Brunswick, to Olds, Alberta.

989. Delay in movement of freight traffic and overcharge in weights on shipment by Canadian Northern Quebec Railway and Quebec and Lake St. John Railway.

990. Excessive rates charged by the Dominion Express Company on shipment of corsets from Quebec to Vancouver, British Columbia.

991. Excessive freight rates on corn shipments from Michigan Central Railroad and Pere Marquette Railroad points.

992. Poor train service of the Grand Trunk Railway to and from Watford, Ontario.

993. Blocking of tracks at crossing by cars of Grand Trunk Railway at Coteau Junction, Ontario, and also treatment of passengers at station by employees of the railway.

994. Closing of the Canadian Pacific and Great Northwestern Telegraph offices in the village of Buckingham, Quebec.

995. Poor station accommodation of the Canadian Pacific Railway at Elkhorn, Manitoba.

996. Loss of houshold effects shipped by the Caandian Pacific Railway from Winnifred, Alberta to Fernie, British Columbia.

997. Unsatisfactory service of the Canadian Northern Telegraph Company at Prince Albert, Saskatchewan.

998. Excessive freight rates of the Canadian Pacific Railway on six cars of bricks from Milton to Bala, Ontario.

999. Extra charge of ten cents by the Grand Valley Railway for tickets purchased on trains.

1000. Private telephone rates furnished by the Bell Telephone Company at Montreal, Quebec.

1001. Switch lights and conditions of engine No. 21 on Prince Albert-Regina branch of the Canadian Northern Railway Company.

1002. Loss of furniture shipped by freight and refusal of the Toronto, Hamilton and Buffalo Railway and the Michigan Central Railway to compensate therefor.

1003. Refusal of the Grand Trunk Railway to remove snow off private siding at Mile End, Quebec.

1004. Train service on the Quebec Southern Railway between Sorel and St. Hyacinthe, Quebec.

1005. Unauthorized connection of the Vancouver, Victoria and Eastern Railway at Danville, Midway and Myncaster, also discrimination in tariffs of tolls between Princeton and Drumbo, British Columbia.

1006. Excessive freight rates of the Quebec and Lake St. John Railway on shipment between Quebec and Rivière à Pierre, Quebec.

1007. Refusal of the Windsor, Essex and Lake Shore Rapid Railway to extend time for the use of commutation tickets.

1008. Loss of horses on right of way of the Canadian Pacific Railway between sections 15 and 16, Township 7, range 10, west of the 2nd meridian, on account of fences being down near Wolseley, Saskatchewan.

1009. Excessive freight rates of the Canadian Pacific Railway on vegetable shipments from Frankline to Winnipeg, Manitoba.

1010. Failure of the Grand Trunk Pacific Railway to provide proper farm crossing on farm near Nokomis, Saskatchewan.

1011. Excessive freight and express rates on the products of farm and orchards at Kamloops, British Columbia.

1012. Obstruction to free navigation of watercourse of Victoria Harbour, caused by swing bridge giving access to railway depot, Victoria, British Columbia.

1013. Lack of accommodation furnished by the Canadian Pacific Railway between Burton and Edgewood on Arrow Lakes, British Columbia.

1014. Minimum weights in carloads on export freight traffic.

1015. Excessive switching charges of the Canadian Northern Railway and Canadian Pacific Railway between Canadian Northern Railway siding and Canadian Pacific Railway siding at Winnipeg, Manitoba.

1016. Excessive switching charges of the Canadian Northern Railway and Canadian Pacific Railway on grain from Canadian Northern Railway points to elevators on the Canadian Pacific Railway at Winnipeg, Manitoba.

1017. Poor condition of fences and cattle guards on railways in the province of Manitoba.

1018. Failure of telegraph company to indicate time on blanks when messages are received for transmission at Winnipeg, Manitoba.

1019. Loss of horses and cattle killed on the Canadian Pacific Railway tracks near Miniota, Manitoba, through removal of cattle guards from crossing.

1020. Loss of horses killed by wreck on railway near Laurier, Manitoba.

1021. Stamping by railways at Halifax, Nova Scotia, on bills of lading, the clause 'Loaded by Shippers.'

1022. Proposed location of the Canadian Pacific Railway from Victoria Harbour to Peterborough, Ontario, on property near Hartley, Ontario.

1023. Loss of cattle killed on right of way of the Canadian Pacific Railway at Chaplin, Saskatchewan.

1024. Excessive express rates on shipments to and from Fenwick, Ontario.

1025. Accommodation afforded by the Grand Trunk Railway at Port Dover, Ontario.

1026. Practice of railway companies charging ticket agents $1 for failure to stamp a ticket purchased at station or town office.

1027. Excessive express rates to and from Nanton, Alberta.

1028. Failure of the Canadian Northern Railway to supply fuel for heating station at Brimkild, Manitoba.

1029. Failure of the Canadian Pacific Railway to deliver box of freight consigned to Gaetz Valley, Alberta, via Red Deer, Alberta.

1030. Refusal of Bell Telephone Company to furnish telephone connection with Sorel, Quebec.

1031. Poor condition of the Canadian Pacific Railway for the handling of traffic to and from Wattsburg, British Columbia; also condition of cattle guards, fences, &c.

1032. Unsatisfactory settlement caused by accident on the Temiscouata Railway near Michaud, New Brunswick.

1033. Passenger fares charged by the British Columbia Electric Railway on its line between Vancouver and New Westminster, British Columbia.

1034. Loss of cattle owing to fences being down on right of way of the Canadian Pacific Railway near Port Moody, British Columbia.

1035. Excessive freight rates of the Canadian Pacific Railway on forest products to Edmonton, Alberta.

1036. Wording of contracts on receipt forms and accommodation for handling fruit at fruit shipping points in the Niagara district and use of freight cars for carriage of fruit by express companies.

1037. Station accommodation of the Canadian Pacific Railway at Redvers, Saskatchewan.

1038. Discrimination in local tariffs of express companies against Calgary, Alberta.

1039. Delivery limits of express companies in Winnipeg, Manitoba, and extra charge for delivering outside of city limits.

1040. Express rates and service of companies doing business at Winnipeg, Manitoba.

1041. Express rates and Canadian Pacific Railway train service at Dewdney, British Columbia.

1042. Loss of cattle killed on right of way of Canadian Pacific Railway at Dewdney, Brittish Columbia, owing to improper cattle guards.

1043. Unsatisfactory freight service for the movement of perishable products from Calgary and British Columbia points by the Canadian Pacific Railway.

1044. Excessive freight rates and classification on shipment from Winnipeg, Manitoba.

1045. Proposed change in running of trains 3 and 4 on the Kingston and Pembroke Railway.

1046. Discrimination in passenger rates on the Canadian Pacific Railway from Prescott to Saskatchewan.

1047. Express rates and service at Brandon, Manitoba.

1048. Service and express rates of companies doing business in western Canada.

1049. Overcharge on car of lumber from Hamilton to Listowel, Ontario.

1050. Freight rates charged by railways in the Okanagan Valley, British Columbia.

1051. Freight rates on fish via Canadian Pacific Railway from Lunenburg, Nova Scotia, to Calgary and Edmonton, Alberta.

1052. Discrimination against Campbellcroft, Ontario, as compared with the rates to Port Arthur and Millbrook, Ontario.

1053. Overcharge on empties from Ottawa to London, Ontario.

1054. Failure of the Grand Valley Railway to carry out agreement with farmers along line from Grand River to St. George, Ontario.

1055. Removal of siding at Garnet, Ontario, by the Grand Trunk Railway.

1056. Delay in delivery of express shipments and excessive express rates charged on shipments from Fort Qu'Appelle, Saskatchewan.

1057. Excessive freight rates of the Central Ontario Railway on shipment of corn from Buxton to Bannockburn, Ontario.

1058. Negligence of employees on Quebec and Lake St. John Railway in the handling of shipment of timbers.

1059. Change in name of station on the Grand Trunk Railway from Garden Hill to Campbellcroft, Ontario.

1060. Condition of highway bridge over Francis up to the southeast limit of St. Francis Xavier de Brampton, New Brunswick, on the Orford Mountain Railway.

1061. Abandonment by the New Westminster Southern Railway (Great Northern Railway) old line from Blain to Fraser river, British Columbia.

1062. Excessive rates of the Grand Trunk Railway on bicycles from Hamilton, Ontario.

1063. Excessive freight rates on the Grand Trunk Railway from Moosomin to St. George, Ontario.

1064. Dangerous condition of wooden bridges and trestles between Annapolis Royal and Digby, Nova Scotia.

1065. Removal by the Atlantic and Lake Superior Railway of frogs and sidings at Nouville West, New Brunswick.

1066. Refusal of the Canadian Northern Telegraph Company at Manville, Alberta, to receive collect message.

1067. Excessive rates of Dominion and American Express Companies on car of strawberries to Brandon, Manitoba.

1068. Loss of horses killed on railway on account of insufficient cattle guards near Rocanville, Saskatchewan.

1069. Switching charge of $8 by the Canadian Northern Railway at Winnipeg, Manitoba, on hay in carloads.

1070. Condition of railways, inadequate facilities, inequality of passenger and freight rates on railways in British Columbia.

APPENDIX F.

LIST OF INSPECTIONS MADE BY THE ENGINEERING DEPARTMENT OF THE RAILWAY COMMISSION, APRIL 1, 1908, TO MARCH 31, 1909, INCLUSIVE.

Ottawa, April 30, 1909.

A. D. Cartwright, Esq.,
Secretary of Railway Commission,
Ottawa, Ont.

Sir,—I beg to submit herewith list of examinations and inspections made by the Engineering Department of the Board, covering the period from April 1, 1908, to March 31, 1909.

I have the honour to be sir,

Your obedient servant,

(Sgd.) GEO. A. MOUNTAIN,
Chief Engineer.

LIST OF INSPECTIONS MADE BY THE ENGINEERING DEPARTMENT OF THE RAILWAY COMMISSION, APRIL 1, 1908, TO MARCH 31, 1909, INCLUSIVE.

March 5, 1908.—Inspection interlocker at crossing of the Canadian Pacific Railway by the Grand Trunk Railway at the Don, Toronto, Ont.

March 11, 1908.—Inspection interlocker at crossing of the Grand Trunk Railway by the Canadian Pacific Railway at Lennoxville, Quebec.

March 20, 1908.—Inspection highway crossing over the Canadian Pacific Railway at Durham, Ont.

March 27, 1908.—Inspection subway at Mile Post 124·96 on the line of the Grand Trunk Railway at Brockville, Ont., where the Canadian Pacific Railway passes under the Grand Trunk Railway.

April 1, 1908.—Inspection crossing of the Canadian Pacific Railway over the Quebec and Lake St. John Railway and the Quebec Railway Light and Power Company at Quebec, P.Q.

April 1, 1908.—Inspection interlocker at crossing of the Canadian Pacific Railway by the Grand Trunk Railway at the Don, Toronto, Ont.

April 1, 1908.—Inspection highway crossings in the town of Napanee on the line of the Grand Trunk Railway.

April 2, 1908.—Inspection highway crossing on the line of the Canadian Pacific Railway at Dorchester street, Quebec, P.Q., *re* protection.

April 2, 1908.—Inspection highway crossing known as 'Cowan's Crossing,' two miles east of Scarboro Junction on the line of the Grand Trunk Railway.

April 3, 1908.—Inspection Pike Drainage Works about one mile west of Prairie siding on the line of the Grand Trunk Railway, township of Raleigh, Ont.

April 10, 1908.—Inspection at Mileage 61, on the Macleod branch of the Canadian Pacific Railway, as to cattle guards and crossings.

April 13, 1908.—Inspection of crossing on road-allowance, Canadian Pacific Railway, Rush Lake, Sask.

April 13, 1908.—Inspection crossing Montreal Street Railway by spur of the Canadian Northern Quebec Railway to the harbour at Montreal, P.Q.

April 22, 1908.—Inspection location of the Canadian Pacific Railway across property of George Elliott at Woodbridge, Ont, on their Toronto-Bolton line.

April 22, 1908.—Inspection lands in Toronto to be taken by the Canadian Northern Ontario Railway to divert part of Park Drive and a trespass road.

April 23, 1908.—Inspection proposed drain on farm of John Turnbull, of Komoko, Ont., on the line of the Grand Trunk Railway.

April 24, 1908.—Inspection proposed drain across right of way of Grand Trunk Railway one mile east of Elora, Ont.

April 24, 1908.—Inspection highway crossing one mile south of Moorfield, on the line of the Grand Trunk Railway.

April 28, 1908.—Inspection crossing at intersection of the Lee-Mountain road with the Toronto, Hamilton and Buffalo Railway, in the township of Saltfleet, Ont.

April 28, 1908.—Inspection right of way Canadian Northern Railway in connection with cattle guards near Togo, Sask.

May 2, 1908.—Inspection interlocking plant six miles east of Winnipeg on the Molson cut-off of the Canadian Pacific Railway.

May 6, 1908.—Inspection gates at Simcoe street, Oshawa, Ont, on the line of the Grand Trunk Railway.

May 7, 1908.—Inspection crossing of Main street in the town of Forest by the Grand Trunk Railway.

May 8, 1908.—Inspection highway crossing between counties of Waterloo and Wellington on the line of the Guelph and Goderich Railway at mileage 20.5.

May 8, 1908.—Inspection on the Canadian Northern Railway in connection with cattle guards and fencing on right of way in municipality of Springfield and Tache.

May 12, 1908.—Inspection crossing of public road by single track of the Grand Trunk Railway just east of the station at Maxville, Ont.

May 13, 1908.—Inspection proposed extension of Mountain street, Hull, P.Q., across the tracks of the Canadian Pacific Railway.

May 14, 1908.—Inspection crossing of Pitt street, Cornwall, Ont., by the line of the Grand Trunk Railway.

May 15, 1908.—Inspection electro-pneumatic train control system, patented by J. A. Whyte, Ottawa, Ont.

May 15, 1908.—Inspection interlocking plant at the Canadian Northern Railway crossing of the Brandon, Saskatchewan and Hudson Bay Railway.

May 14, 1908.—Inspection interlocking plant at the crossing of the Canadian Northern Railway over the Canadian Pacific Railway at Morris, Man.

May 16, 1908.—Inspection interlocking plant 11 miles west of Brandon at the Canadian Northern Railway crossing over the Canadian Pacific Railway.

May 18, 1908.—Inspection interlocker at crossing of the Canadian Pacific Railway and the Chatham Wallaceburg and Lake Erie Railway at Raleigh street Chatham, Ont.

May 19, 1908.—Inspection interlocker at crossing of the Lake Erie and Detroit River Railway by the Chatham, Wallaceburg and Lake Erie Railway at Cedar Springs, Ont.

May 19, 1908.—Inspection interlocking plant at crossing of the Canadian Pacific Railway by the Canadian Northern Quebec Railway at Lachevrotiere, P.Q.

May 19, 1908.—Inspection highway crossing at mileage 20, on the Lindsay branch of the Canadian Pacific Railway, township of Ops.

May 19, 1908.—Inspection highway crossing on the line of the Pere Marquette Railway at Cedar Springs, Ont.

May 20, 1908.—Inspection highway crossings on the deviation of the Grand Trunk Railway, Midland branch, from Albert street in the town of Lindsay, to a point in the east half of lot No. 25, concession 2, township of Ops, county of Victoria, Ont.

May 21, 1909.—Inspection highway crossing 1,800 feet east of Bowmanville station on the main line of the Grand Trunk Railway.

May 22, 1908.—Inspection highway crossings on the line of the Grand Trunk Pacific Railway near Miniota, at mileage 24·1, mileage 24·6 and mileage 25·2.

May 26, 1909.—Inspection Brantford and Hamilton Electric Railway, Hamilton to Ancaster and Ancaster to Brantford, for opening for traffic.

May 30, 1908.—Inspection interlocking plant 14 miles west of Winnipeg crossing of Canadian Northern Railway main line and Souris branch of the Canadian Pacific Railway.

June 1, 1908.—Inspection interlocking plant at the west end of Portage la Prairie yard, Canadian Pacific Railway, Canadian Northern Railway and the Grand Trunk Pacific Railway.

June 1, 1908.—Inspection of branch of the Canadian Northern Quebec Railway from St. Sauveur to Huberdeau, a distance of 30·5 miles, as to general conditions.

June 1, 1908.—Inspection proposed site for a station at Omemee Junction, Ont., on the line of the Grand Trunk Railway.

June 1, 1908.—Inspection proposed crossing of the Montreal Terminal Railway by the Canadian Northern Quebec Railway tracks into premises of the Lakefield Portland Cement Company at Lakefield, P.Q.

June 2, 1908.—Inspection work done at crossing of the Lee Mountain road by the Toronto, Hamilton and Buffalo Railway, about one and a half miles east of Stony Creek, Ont.

June 3, 1908.—Inspection Brooker's Crossing, two and a half miles west of Mallorytown, on the line of the Grand Trunk Railway, in the township of the Front of Escott.

June 3, 1908.—Inspection highway crossing on the line of the Toronto, Hamilton and Buffalo Railway, just west of station at Jerseyville, Ont.

June 8, 1908.—Inspection crossings of Queen and Ann streets, in the village of Blyth, by the Guelph and Goderich branch of the Canadian Pacific Railway.

June 8, 1908.—Inspection crossing of highway between concessions 9 and 10, in township of Motts, just east of Blyth, by Guelph and Goderich branch of the Canadian Pacific Railway.

June 9, 1908.—Inspection interlocking appliances at crossing of double track of the Canadian Pacific Railway by the single track of the Montreal Street Railway on Papineau avenue, city of Montreal, P. Q.

June 9, 1908.—Inspection interlocking appliances for protection of trains, Lachine canal bridge, on the line of the Canadian Pacific Railway, near Highlands, P.Q.

June 15, 1908.—Inspection Pheasant's Hill branch extension of the Canadian Pacific Railway from Saskatoon to Asquith, a distance of 23 miles.

June 16, 1908.—Inspection of Pheasant's Hill branch of the Canadian Pacific Railway from Lanigan, mileage 254·5 to Saskatoon, mileage 328·4, a distance of 73·9 miles.

June 16, 1908.—Inspection proposed crossing over St. Charles street on Jones bridge, by the Canadian Pacific Railway at St. Johns, P.Q.

June 16, 1908.—Inspection Canadian Northern Ontario Railway for opening for traffic from Still river to Romford.

June 16, 1908.—Inspection interlocker at crossing of the Canadian Pacific Railway and the Canadian Northern Ontario Railway near Elbow Creek, Ont.

June 16, 1908.—Inspection from crossing at St. Bruno, P.Q., on the line of the Grand Trunk Railway.

June 17, 1908.—Inspection interlocking plant east end of Portage la Prairie yard, Canadian Northern Railway crossing with the Grand Trunk Pacific Railway.

June 17, 1908.—Inspection farm crossing for Mrs. MacLeod, at Footes Bay, Ont., on the line of the Canadian Northern Ontario Railway.

June 18, 1908.—Inspection farm crossing for Mr. Dufresne on the St. Guillaume branch of the Canadian Pacific Railway near St. Pie station, P.Q.

June 24, 1908.—Inspection interlocker on the line of the Canadian Pacific Railway near London asylum, London, Ont.

June 24, 1908.—Inspection cattle-guards on the line of the Vancouver, Westminster and Yukon Railway, between Vancouver and Cloverdale, B.C.

June 25, 1908.—Inspection highway crossing in village of Duncan, B.C.

June 25, 1908.—Inspection proposed crossing of the Esquimalt and Nanaimo Railway over highway at mile post 41, near Duncan, B.C.

June 26, 1908.—Inspection drainage at Mountain, complained of by S. B. Porter, health inspector.

June 26, 1908.—Inspection condition drainage along right of way of the Canadian Pacific Railway on B. McKendrie's property at Mountain, Ont.

June 30, 1908.—Inspection road diversion at Canford, B.C., on N. K. and S. Railway.

July 2, 1908.—Inspection crossing of the Grand Trunk Railway by the Toronto and York Radial Railway, in the village of Sutton, Ont.

July 3, 1908.—Inspection Listowel branch of the Guelph and Goderich Railway from Linwood Junction to Listowel, a distance of 16·1 miles, for opening for traffic.

July 3, 1908.—Inspection of the St. Mary's and Western Ontario Railway for opening for traffic, also bridges on the line.

July 3, 1908.—Inspection of Canadian Pacific Railway (Elwood, Burt spur) at Carrigan, N.B.

July 3, 1908.—Inspection public highway crossing Canadian Pacific Railway, St. Andrews branch, Rolling Dam, N.B.

July 3, 1908.—Inspection bridges on the Atlantic division of the Canadian Pacific Railway, Fredericton section.

July 3, 1908.—Inspection bridges on the Gibson section, Atlantic division of the Canadian Pacific Railway.

July 3, 1908.—Inspection road diversion by the Canadian Pacific Railway, lot 15, parish of Brighton, county of Carlton, N.B., near Newburg Junction.

July 3, 1908.—Inspection New Brunswick Southern Railway from St. John to St. Stephen, N.B.

July 3, 1908.—Inspection public road diversion from a point on lot 15, parish of Brighton, county of Carlton, N.B., near Newburg Junction, on the line of the Canadian Pacific Railway.

July 3, 1908.—Inspection Brockville, Westport and Northwestern Railway as to general condition.

July 4, 1908.—Inspection portion of the Walkerton and Lucknow Railway from Saugeen Junction to mile 27·5 at Hanover for opening for traffic.

July 4, 1908.—Inspection diversions of the Toronto, Grey and Bruce Railway for opening of traffic from mileage 7·3 to 8 near Emery; mileage 10·8 to 13·4 near Woodbridge; 15·3 to 17·5 near Eleinburg, and mileage 19·3 to 21·8 near Bolton, Ont.

July 6, 1908.—Inspection line of the Great Northern Railway of Canada from Phœnix to Grand Forks, B.C., a distance of 24 miles.

July 6, 1908.—Inspection location of spur crossing 5th and 6th streets on the line of the Canadian Pacific Railway in the town of Grand Forks, B.C.

July 6, 1908.—Inspection station grounds at St. Pie, P.Q., on the St. Guillaume branch of the Canadian Pacific Railway.

July 7, 1908.—Inspection bridges on the St. John section, Atlantic division, of the Canadian Pacific Railway.

July 7, 1908.—Inspection bridges on the Woodstock section, Atlantic division of the Canadian Pacific Railway.

July 7, 1908.—Inspection bridges on the Edmonton section of the Atlantic division of the Canadian Pacific Railway.

July 10, 1908.—Inspection drainage on farm of P. Livernoche and others at Louiseville, P.Q., on the line of the Canadian Pacific Railway.

July 15, 1908.—Inspection diamond at the intersection of Hess and Herkimer streets, Hamilton, Ont.

July 16, 1908.—Inspection Canadian Pacific Railway from Kemptville Junction, mileage 102·3, to Smith's Falls, mileage 123·3, a distance of 20 miles.

July 20, 1908.—Inspection Grand Valley Railway crossing of tracks of the Grand Trunk Railway in the city of Brantford, Ont.

July 20, 1908.—Inspection crossing of the Toronto, Hamilton and Buffalo Railway by the Grand Valley Railway in the city of Brantford.

July 20, 1908.—Inspection crossing of the Brantford and Hamilton Railway by the Grand Valley Railway at Brantford, Ont.

July 20, 1908.—Inspection proposed location of highway crossing in the township of Woolastin, near Coe Hill on the Central Ontario Railway.

July 21, 1908.—Inspection station grounds at Maynooth, Ont., on the line of the Central Ontario Railway.

July 21, 1908.—Inspection crossing at Jamieson avenue, Toronto, Ont.

July 22, 1908.—Inspection proposed farm crossing on the line of the Toronto, Hamilton and Buffalo Railway, west of Hamilton, Ont.

July 23, 1908.—Inspection for opening for traffic of the Chatham, Wallaceburg and Lake Erie Railway from the crossing of the Michigan Central Railway near Charing Cross to Erie Beach Park.

July 24, 1908.—Inspection interlocking plant at Chatham, where the Chatham, Wallaceburg and Lake Erie Railway crosses the Grand Trunk Railway.

July 24, 1908.—Inspection road crossings at Hagersville, Ont., over the Michigan Central Railway.

July 24, 1908.—Grand Trunk Pacific Railway for opening for traffic from Winnipeg to Battle River, a distance of 625 miles.

July 31, 1908.—Inspection Amos Morgan's property crossed by the right of way of the Canadian Pacific Railway, lot 1, concession 9, near Crookstown, Ont.

August 3, 1908.—Inspection cattle guards at Cowley, Alta.

August 3, 1908.—Inspection proposed change of location of the Crowsnest branch of the Canadian Pacific Railway in the vicinity of Pincher's Creek, and Cowley, Alta.

August 5, 1908.—Inspection Main street crossing at Welland, Ont., over the tracks of the Grand Trunk Railway.

August 6, 1908.—Inspection proposed road diversion on the Toronto, Hamilton and Buffalo Railway, known as the London to Hamilton road, at a point three miles east of the city of Brantford, Ont.

August 6, 1908.—Inspection for opening for traffic of the Walkerton and Lucknow branch of the Canadian Pacific Railway, mileage 27·5 to 37·7.

August 12, 1908.—Inspection interlocking plant at Sarnia where the Sarnia Electric Railway crosses the Grand Trunk Railway.

August 15, 1908.—Inspection of branch line of the White Pass and Yukon Railway,

August 15, 1908.—Inspection temporary bridge over the Cornwall canal on the Ottawa and New York Railway.

August 25, 1908.—Inspection double track of the Canadian Pacific Railway between Kemptville Junction and Finch, Ont.

August 25, 1908.—Inspection derailment of Great Northern Railway train about one mile west of Port Kells, B.C.

August 28, 1908.—Inspection lands at St. Hilaire, for expropriation by the Grand Trunk Railway for double track.

August 28, 1908.—Inspection crossing of highway in village of Maxville by the Grand Trunk Railway.

August 29, 1908.—Inspection Central Vermont Railway in Canada as to general conditions.

August 30, 1908.—Inspection bridge at Rush lake, Swift Current Section, Canadian Pacific Railway.

August 30, 1908.—Inspection highway crossings on grade revision of the Canadian Pacific Railway between Kincorth and Walsh, mileage 102·11 to 110·56, Medicine Hat section.

August 30, 1908.—Inspection bridges on Medicine Hat section, miles 124 and 144·6.

September 4, 1908.—Inspection property of Mr. McCuaig at Dalhousie Mills, Ont., to be expropriated by the Canadian Pacific Railway.

September 5, 1908.—Inspection Prince Albert branch of the Canadian Northern Railway from Tisdale to Melfort, a distance of 26 miles.

September 8, 1908.—Inspection interlocking plant at Nokomis, Alta.

September 8, 1908.—Inspection Canadian Pacific Railway between Rocanville and Tantallon.

September 9, 1908.—Inspection Grand Trunk Pacific Railway for opening for traffic between Portage la Prairie, mileage 54·3, and Pacific Junction, mileage 6·5, and from Oak Point Junction to a junction with the line of the Canadian Northern Railway near Pembina Avenue, Winnipeg, mileage, 4·4 to 3·0.

September 11, 1908.—Inspection Grand Valley Railway as to general conditions.

September 11, 1908.—Inspection farm crossing of H. Frenette at Portneuf, on the line of the Canadian Northern Quebec Railway.

September 11, 1908.—Inspection farm crossing of F. Leduc on the line of the Canadian Northern Quebec Railway, parish of St. Casimir, P.Q.

September 11, 1908.—Inspection road diversion on the line of the Canadian Northern Quebec Railway between Portneuf and Cap Sante, about mile 37.

September 12, 1908.—Inspection drainage on farm of H. Frenette, at Portneuf, P.Q.

September 12, 1908.—Inspection overhead bridge Eight street, Brandon, on the line of the Canadian Pacific Railway.

September 14, 1908.—Inspection farm crossing Madame Plouffe, mile 15, St. Jerome-St. Sauveur branch of the Canadian Northern Quebec Railway.

September 18, 1908.—Inspection bridge at mileage 109·9, Calgary section of the Canadian Pacific Railway.

September 18.—Inspection bridge at mileage 179·1, Calgary section of the Canadian Pacific Railway.

September 18, 1908.—Inspection bridge over irrigation canal near Langdon on the line of the Canadian Pacific Railway.

September 18, 1908.—Inspection bridge over the irrigation canal near Strathmore, on the line of the Canadian Pacific Railway.

September 18, 1908.—Inspection crossings on the line of the Canadian Pacific Railway south of Claresholm, Sask.

September 18, 1908.—Inspection drainage at Lachine, P.Q.

September 19, 1908.—Inspection twenty bridges on the mountain section, Pacific division of the Canadian Pacific Railway between Laggan and Revelstoke, B.C.

September 21, 1908.—Inspection Canadian Northern Ontario Railway 'Y' at Sudbury, Ont.

September 22, 1908.—Inspection bridges on Cascades section, Pacific division, Canadian Pacific Railway between North Bend, and Vancouver, B.C.

September 22, 1908.—Inspection farm crossing Mrs. McGregor on the line of the Canadian Pacific Railway at Warren, Ont.

September 23, 1908.—Inspection highway crossing on line of the Canadian Pacific Railway at Cache bay, Ont.

September 25, 1908.—Inspection double track Canadian Pacific Railway from Kemptville to Mountain, Ont.

September 26, 1908.—Inspection for opening for traffic of the Canadian Pacific Railway, Medicine Hat section, mileage 15 to 22·1; 49 to 59; 75·1 to 80·1; also new second track from mileage 43·1 to Dunmore Station.

September 28, 1908.—Inspection station at St. Brigide, and shelter at St. Gregoire on the line of the Canadian Pacific Railway.

September 28, 1908.—Inspection bridges and road-bed on the line of the Canadian Northern Railway between Port Arthur and Winnipeg, Man.

September 28, 1908.—Inspection bridge at River du Sud on the line of the Quebec, Montreal and Southern Railway.

September 30, 1908.—Inspection highway crossings on the line of the St. Lawrence and Adirondack Railway.

October 1, 1908.—Inspection opening for traffic of the Canadian Pacific Railway, Weyburn to Stoughton branch, a distance of 36·7 miles.

October 6, 1908.—Inspection opening for traffic Canadian Pacific Railway diversion Medicine Hat section, from Piapot, mileage 67·75, to mileage 75·10, distance 7·35 miles.

October 8, 1908.—Inspection cattle guards near Winnipeg, known as the Sutherland guards.

October 9, 1908.—Inspection connection between Canadian Pacific Railway and Canadian Northern Railway at St. Jerome, P.Q.

October 9, 1908.—Inspection half interlocker at Sutton, Ont., at crossing of the Grand Trunk Railway by the Toronto and York Radial Railway.

October 9, 1908.—Inspection Canadian Northern Quebec Railway, St. Jerome to Huberdeau.

October 10, 1908.—Inspection for opening for traffic of the Brantford and Hamilton Railway from Alfred street to Market street in the city of Brantford, Ont.

October 12, 1908.—Inspection *re* proposed station near Vineland on the Grand Trunk Railway.

October 12, 1908.—Inspection opening for traffic of the Canadian Pacific Railway west of Saskatoon from Asquith, mileage 25·0 to Wilkie, mileage 99·0, distance, 74·0 miles.

October 13, 1908.—Inspection cattle guards on the Canadian Northern Railway main line at Chipman and Lamont.

October 15, 1908.—Inspection diamond at crossing of the Canadian Pacific Railway by the Toronto Suburban Railway on St. Claire Avenue, Toronto, Ont.

October 15, 1908.—Inspection drain complained of by Mr. Freeman of Burlington Junction on the line of the Grand Trunk Railway.

October 16, 1908.—Inspection new road leading from new Bolton station on the Canadian Pacific Railway to highway leading to village of Bolton, Ont.

October 16, 1908.—Inspection Canadian Pacific Railway track at Bolton *re* complaint of A. A. McFall.

October 21, 1908.—Inspection grade revision on the line of the Canadian Pacific Railway at Romford crossing.

October 21, 1908.—Inspection crossings in the township of Medonte on the Toronto-Sudbury branch of the Canadian Pacific Railway.

October 21, 1908.—Inspection interlocker at Hervey Junction at crossing of the Canadian Northern Quebec Railway and the National Transcontinental Railway.

October 22, 1908.—Inspection near St. Pauline station on the Canadian Northern Quebec Railway on the property of N. Lessard.

October 22, 1908.—Inspection culverts on the Canadian Northern Quebec Railway between Hervey Junction and St. Tite, Que.

October 22, 1908.—Inspection train service and accommodation on the Canadian Northern Quebec Railway at St. Tite, Que.

October 23, 1908.—Inspection bridges and abutments on the Canadian Pacific Railway, Ignace Station.

October 23, 1908.—Inspection for opening for traffic second track, Ignace section, Canadian Pacific Railway, mileage 127·8, to 133·5, distance, 5·7 miles.

October 24, 1908.—Inspection bridges, abutments and piers, Kenora section, Canadian Pacific Railway.

October 24, 1908.—Inspection opening for traffic second track of Kenora section of the Canadian Pacific Railway, from Kenora, mileage 0, to Busteed, mile 14·0, and from Deception, mile 18·6, to Ingolf, mile 31·2.

October 24, 1908.—Inspection opening for traffic Canadian Pacific Railway second track, Ignace section, mile 98·6 to mile 99; from mile 102·65 to 104·61, and from mile 130 to mile 132.

October 26, 1908.—Inspection crossings over the Grand Trunk Railway tracks and the Montreal, Park and Island Railway tracks in the town of Lachine.

October 27, 1908.—Inspection Brennan's siding on Ferguson avenue, Hamilton, Ont.

October 27, 1908.—Inspection interlocker and gates at crossing of Toronto Railway by the Grand Trunk Railway at Front street, Toronto, Ont.

October 29, 1908.—Inspection Canadian Pacific Railway for opening for traffic, Reston-Wolseley branch from Kaiser, mileage 98·2, to Wolseley, mileage 122·2, distance 24 miles.

October 30, 1908.—Inspection Canadian Pacific Railway, Sheho extension, from mileage 42·2 to mileage 66·2, a distance of 24 miles.

November 4, 1908.—Inspection Canadian Pacific Railway for opening for traffic Moosejaw Northwestern extension from mile 63 to 91, a distance of 28 miles.

November 6, 1908.—Inspection *re* estimate of cost of subway under the Canadian Northern Railway at Saskatoon, Sask.

November 7, 1908.—Inspection interlocker at Canadian Pacific Railway crossing on Richmond street, London, Ont.

November 7, 1908.—Inspection Canadian Pacific Railway crossing on Quebec street, London, Ont.

November 7, 1908.—Inspection condition of culvert under the tracks of the Canadian Pacific Railway on lot 20, township of London, two miles west of London, Ont.

November 17, 1908.—Inspection bridges on the Emerson section of the Canadian Pacific Railway.

November 17, 1908.—Inspection Canadian Northern Ontario Railway from Rosedale to Queen street, Toronto, Ont.

November 18, 1908.—Inspection proposed site of crossing for H. New, owner of pressed brick works on the line of the Toronto, Hamilton and Buffalo Railway at Hamilton, Ont.

November 19, 1908.—Inspection Canadian Northern Ontario Railway spur in the town of Parry Sound, Ont.

November 19, 1908.—Inspection deviation of Great North Road in the town of Parry Sound, Ont.

November 19, 1908.—Inspection Canadian Northern Ontario Railway trestle approach to the Ottawa river bridge at Hawkesbury, Ont.

November 19, 1908.—Inspection farm crossing of E. Raymond, Staynerville, P.Q., on the line of the Canadian Pacific Railway.

November 19, 1908.—Inspection interlocking plant at crossing of the Canadian Northern Ontario Railway and the Grand Trunk Railway at Hawkesbury, Ont.

November 19, 1908.—Inspection opening for traffic of the Canadian Pacific Railway second track, Fort William section, from mile 31·6 to 31·63, from 106 to 106·2, and from 112·6 to 124·7.

November 20, 1908.—Inspection Canadian Pacific Railway for opening for traffic second track from mile 71·9 to 89·9 and from 140·8 to 148.

November 20, 1908.—Inspection Hawkesbury street crossings by the Canadian Northern Railway, affecting Mrs. A. Brown.

November 21, 1908.—Inspection switch on the Canadian Northern Quebec Railway at Morrow street, Montreal, P.Q.

November 24, 1908.—Inspection opening for traffic Canadian Northern Railway, Rossburn extension, from Rossburn, mile 78·7, to Russell, mile 104·3, distance 25·6 miles.

November 24, 1908.—Inspection opening for traffic Grand Trunk Pacific Railway, Lake Superior branch, from West Fort William, mile 0·5, to Lake Superior Junction, mile 288·2, distance 287·5 miles.

November 26, 1908.—Inspection farm crossing F. Quebec, Parry Sound, Ont., on line of the Canadian Northern Railway.

November 27, 1908.—Inspection proposed site for a station at Crysler, Ont., on the line of the Ottawa and New York Railway.

November 28, 1908.—Inspection opening for traffic of the Canadian Northern Railway, Goose Lake extension, from Saskatoon, mile 0, to Zelanda, mile 60, distance 60 miles.

November 28, 1908.—Inspection Canadian Northern Railway, Prince Albert section, from Prince Albert to Erwood, distance 169·8 miles, in connection with the complaint of the Prince Albert Board of Trade as to unsafe condition of the road-bed.

November 28, 1908.—Inspection street crossings in the town of Vegreville over the tracks of the Canadian Northern Railway.

December 1, 1908.—Inspection gates at crossing on Bloor street by the Grand Trunk Railway in Toronto, Ont.

December 2, 1908.—Inspection Grand Trunk bridges between St. Catharines and Merritton.

December 2, 1908.—Inspection five overhead bridges between St. Catharines and Merritton, Ont.

December 3, 1908.—Inspection street crossings on the line of the Walkerton and Lucknow Railway in the town of Durham, Ont.

December 3, 1908.—Inspection culvert on the line of the Canadian Pacific Railway at Lily lake, Ont., township of Humphrey, Muskoka district.

December 3, 1908.—Inspection *re* accident at Ottawa South on the line of the Grand Trunk Railway.

December 3, 1908.—Inspection new second track of the Grand Trunk Railway North Parkdale to St. Claire Avenue in the city of Toronto, Ont.

December 4, 1908.—Inspection interlocker at crossing of the Tilsonburg branch of the Grand Trunk Railway by the Brantford and Hamilton Railway in the city of Brantford, Ont.

December 4, 1908.—Inspection interlocking plant installed by the Montreal Street Railway on Pie IX. Avenue crossing of the Chateauguay and Northern Railway, Montreal, P.Q.

December 4, 1908.—Inspection St. Catherine Street bridge over Hochelaga yard of the Canadian Pacific Railway, Montreal.

December 5, 1908.—Inspection opening for traffic Canadian Pacific Railway Moosejaw Northwestern extension, mileage 91 to mileage 169·8, distance of 78·8 miles.

December 7, 1908.—Inspection opening for traffic Canadian Northern Railway, Lumsden diversion, 8·46 miles.

December 8, 1908.—Inspection Canadian Northern Ontario Railway, Hawkesbury trestle approach Ottawa river bridge.

December 8, 1908.—Inspection Canadian Northern Ontario Railway location near Grenville, P.Q.

December 11, 1908.—Inspection highway crossings at Cache bay, Ont.

December 14, 1908.—Inspection sewer under the tracks of the Grand Trunk Railway in the town of Notre Dame de Grace, P.Q.

December 14, 1908.—Inspection fences on the line of the Canadian Pacific Railway, Grand Trunk Railway and the Canadian Northern Ontario Railway between Winchester street and Queen street, Toronto, Ont.

December 14, 1908.—Inspection semaphores just west of Bathurst street bridge, Toronto, Ont.

December 15, 1908.—Inspection interlocking appliances at crossing of the Grand Trunk Railway by the Lake Erie and Detroit River Railway at Chatham, Ont.

December 15, 1908.—Inspection fences on the line of the Grand Trunk Railway at Swansea, Ont.

December 15, 1908.—Inspection crossing of Lesperance road by Grand Trunk Railway, Tecumseh, Ont.

December 15, 1908.—Inspection interlocker tower at crossing of Grand Trunk Railway by the Chatham Wallaceburg and Lake Erie Railway at Chatham, Ont.

December 16, 1908.—Inspection new second track of Grand Trunk Railway between Hamilton and Port Dover, Ont.

December 16, 1908.—Inspection fencing on the line of the Canadian Northern Railway, Oak Point branch, section 14-3-1, W.P.M.

December 17, 1908.—Inspection spur to Peters Coal Company at West Toronto, Ont., on the line of the Canadian Pacific Railway.

December 18, 1908.—Inspection *re* interchange in traffic between the Grand Trunk Railway and the Canadian Pacific Railway, at Listowel, Ont.

December 18, 1908.—Inspection highway crossings on the Canadian Northern Railway, Oak Point branch.

December 18, 1908.—Inspection bridges, piers and abutments on the Canadian Pacific Railway, Fort William section.

December 18, 1908.—Inspection Chatham, Wallaceburg arnd Lake Erie Railway for opening for traffic on Union street, Aberdeen bridge, King street, Third street, Raleigh street, from Raleigh street to William street, and on William and Queen streets in the city of Chatham, Ont.

December 22, 1908.—Inspection road crossing on the Grand Trunk Railway near St. Marys, Ont.

December 29, 1908.—Inspection interlocking plant at Rockland, Ont., at crossing of the Grand Trunk Railway by the Canadian Northern Ontario Railway.

December 29, 1908.—Inspection grade revision between Woodstock and Hartland, N.B., near Newburg Junction, mile 55·3 to 59·8 and from mile 62·5 to 64·0 near Hartland Junction on the line of the Canadian Pacific Railway, for opening for traffic.

December 29, 1908.—Inspection diversions of highways in the vicinity of Newburg Junction, N.B., by the Canadian Pacific Railway.

December 31, 1908.—Inspection interprovincial bridge at Ottawa, Ont.

January 2, 1909.—Inspection electric bell installed by the Grand Trunk Railway at Main street crossing, Forest, Ont.

January 7, 1909.—Inspection culvert on the line of the Canadian Pacific Railway on A. Mayer's farm at Allan Park, Ont.

January 7, 1909.—Inspection Hutton Hill highway crossing on the Walkerton and Lucknow Railway in township of Bentinck, west of Durham, Ont.

January 7, 1909.—Inspection wire crossings over the Canadian Pacific Railway of the Ingersoll Electric Light and Power Company at Ingersoll, Ont.

January 5, 1909.—Inspection new road at Bolton on the line of the Canadian Pacific Railway.

January 9, 1909.—Inspection farm crossing, C. Franche, on the line of the Canadian Northern Ontario Railway at Wendover, Ont.

January 9, 1909.—Inspection opening for traffic Canadian Pacific Railway Gull Lake diversion from mileage 35·8 to 42·5.

January 9, 1909.—Inspection road crossings, Canadian Pacific Railway, grade revision, from Tompkins to Crane Lake, nine crossings in all.

January 9, 1909.—Inspection road crossings Canadian Pacific Railway, Medicine Hat section, grade revision, between Secord to Antelope, eight crossings in all.

January 9, 1909.—Inspection road crossings Canadian Pacific Railway, Medicine Hat section, grade revision, between Gull Lake and Carmichael, eight crossings in all.

January 9, 1909.—Inspection road crossings Canadian Pacific Railway, Medicine Hat section, grade revision, between Piapot and Maple Creek, sixteen crossings in all.

January 10, 1909.—Inspection highway crossing over the Canadian Pacific Railway, five miles east of Swift Current, as to its unsafe condition.

January 11, 1909.—Inspection crossing over the Canadian Pacific Railway tracks at Qu'Appelle, Sask., as to its unsafe condition.

January 14, 1909.—Inspection crossing of the Ottawa Electric Railway by spur of the Canadian Pacific Railway at the end of St. Patrick street, Ottawa, Ont.

January 14, 1909.—Inspection connection of Napierville Junction Railway with the Grand Trunk Railway at Lacolle, P.Q.

January 15, 1909.—Inspection bridges on south bank of Lachine canal, Canadian Pacific Railway.

January 15, 1909.—Inspection bridge over Canal at Cardinal, Ont., Grand Trunk Railway.

January 18, 1909.—Inspection gates at Thames street crossing of the Grand Trunk Railway at Ingersoll, Ont.

January 18, 1909.—Inspection interlocking appliances at crossing of Grand Trunk Railway by the Hamilton Street Railway at intersection of Barton street and Ferguson avenue, Hamilton, Ont.

January 18, 1909.—Inspection crossing of Grand Trunk Railway by the Canadian Pacific Railway at Brampton, Ont.

January 18, 1909.—Inspection line of the Brantford and Hamilton Railway between Alfred and Market streets in the city of Brantford, Ont.

January 18, 1909.—Inspection gates at the crossing of Thames street, Ingersoll, Ont., by the Grand Trunk Railway.

January 18, 1909.—Inspection interlocker at Lorette, P.Q., at crossing of the Canadian Pacific Railway by the Canadian Northern Quebec Railway.

January 19, 1909.—Inspection half interlocker at Ontario street, Montreal, between the Montreal Street Railway and the Canadian Northern Quebec Railway.

January 19, 1909.—Inspection crossing of the Grand Trunk Railway by the Canadian Pacific Railway at Drumbo, Ont.

January 20, 1909.—Inspection opening of Grand Trunk street across the tracks of the Grand Trunk Railway at Upton, Que.

January 21, 1909.—Inspection opening for traffic the Kettle River Valley Railway from Grand Forks, B.C., mileage 0 to mileage 19.

January 27, 1909.—Inspection opening for traffic Vancouver, Victoria and Eastern Railway from Huntingdon (international boundary) to Cloverdale, distance 29·28 miles; from Blain (international boundary) to the junction at Oliver, distance 11·33 miles, and from a point near Oliver to the Fraser river bridge, distance 9·72 miles.

January 27, 1909.—Inspection *re* complaint Arthur Thuot, of Iberville, P. Q.

January 27, 1909.—Inspection bridges on the eastern division of the Canadian Pacific Railway, Farnham section.

January 27, 1909.—Inspection bridges on the eastern division of the Canadian Pacific Railway, Newport section.

January 27, 1909.—Inspection highway crossings on the Canadian Pacific Railway and the Quebec, Montreal and Southern Railway at Iberville, P.Q.

January 27, 1908.—Inspection highway crossings on the Canadian Pacific Railway at Sherbrooke, P.Q.

January 27, 1909.—Inspection highway crossings on the Grand Trunk Railway at Sherbrooke, P.Q.

January 27, 1909.—Inspection highway crossings on the Grand Trunk Railway at St. John's, P.Q.

January 27, 1909.—Inspection highway crossings on the Canadian Pacific Railway at St. John's, P.Q.

January 28, 1909.—Inspection bridges on the eastern division of the Canadian Pacific Railway, Sherbrooke section.

January 28, 1909.—Inspection highway crossings on the Grand Trunk Railway at Richmond, P.Q.

January 28, 1909.—Inspection highway crossings on the Boston and Maine Railway at Lennoxville, P.Q.

January 28, 1909.—Inspection Canadian Pacific Railway and Grand Trunk Railway level highway crossing at College street, Lennoxville, P.Q.

January 29, 1909.—Inspection opening for traffic of the Canadian Pacific Railway Sheho extension from Leslie, mile 66·2, to Winyard, mile 89, distance 22·8 miles.

February 3, 1909.—Inspection crossing of Place d'Armes opposite Tete du Pont barracks at Kingston, Ont., by the Canadian Pacific Railway.

February 4, 1909.—Inspection highway crossing at Coteau street, Quebec, by the Canadian Pacific Railway.

February 5, 1909.—Inspection opening for traffic Canadian Pacific Railway, Sheho extension, from Leslie, mile 66·2, to Winyard, mile 89·0, distance 22·8 miles.

February 11, 1909.—Inspection *re* ditch on property of G. Elliott, Woodbridge, Ont.

Feburary 12, 1909.—Inspection crossing of Cannifton road by the Grand Trunk Railway at Belleville, Ont.

February 12, 1909.—Inspection overhead bridge on the Grand Trunk Railway at Kingston, Ont.

February 13, 1909.—Inspection highway crossing over the Grand Trunk Railway at Collins Bay, Ont.

February 13, 1909.—Inspection highway crossing over the Grand Trunk Railway on Elliotts lane, Montreal road and Perth road at Kingston, Ont.

February 15, 1909.—Inspection *re* extension of Place Viger station yards at Montreal, P.Q.

February 15, 1909.—Inspection *re* extension of Windsor street station yards at Montreal, P.Q.

February 15, 1909.—Inspection highway crossing over the Grand Trunk Railway in the village of Burlington, Ont.

February 16, 1909.—Inspection Canadian Pacific Railway trestle over Cobbs Lake, Ont.

February 16, 1909.—Inspection highway crossing at Murrays Cut on the Canadian Pacific Railway near Owen Sound, Ont.

February 17, 1909.—Inspection Canadian Pacific Railway, MacLeod branch, location of a proposed spur line to serve the Okotaks Milling Company and Electric Light plant.

February 17, 1909.—Inspection Canadian Pacific Railway, MacLeod branch at Okotoks, re spur line to serve the Pugh and Livingstone Lumber Company, and the Western Canada Pressed Brick and Tile Company.

February 20, 1909.—Inspection crossing where the city of Edmonton and the Strathcona Radial Tramway Co. propose to cross the track of the Canadian Pacific Railway on White Avenue, Strathcona, Alta.

February 20, 1909.—Inspection proposed overhead crossing on the Grand Trunk Pacific Railway over the Fort Saskatchewan trail and the diversion of the Fort Saskatchewan trail to Norton street to cross at right angles under the Grand Trunk Pacific Railway on Norton street, near Edmonton, Alta.

February 20, 1909.—Inspection proposed crossing of the city of Edmonton Street Railway over the lines of the Canadian Northern Railway and the Grand Trunk Pacific Railway on Syndicate avenue, Edmonton, Alta.

February 22, 1909.—Inspection highway crossing on the Michigan Central Railway and Pere Marquette Railway in the village of Rodney, Ont.

February 22, 1909.—Inspection highway crossing over the Pere Marquette Railway and the Michigan Central Railway in the village of Dutton, Ont.

February 22, 1909.—Inspection highway crossing over the Pere Marquette Railway and the Michigan Central Railway in the village of West Lorne, Ont.

February 22, 1909.—Inspection subway where the Chatham, Wallaceburg and Lake Erie Railway crosses underneath the Michigan Central Railway at Charing Cross, Ont.

February 22, 1909.—Inspection highway crossing on the Michigan Central Railway at Queen street in the village of Tilbury, and also at the Fourth Concession road crossing a short distance east of Tilbury, Ont.

February 25, 1909.—Inspection *re* protection at crossing at London Junction, Ont.

February 26, 1909.—Inspection overhead farm crossing at M.P. 125·12, township of London, on A. Dickie's land, on the line of the Grand Trunk Railway.

February 26, 1909.—Inspection highway crossings in the town of Montmorency by the Quebec Railway, Light and Power Company.

March 1, 1909.—Inspection bridges on the Guelph and Goderich Railway.

March 1, 1909.—Inspection bridges, Webbwood section, Lake Superior division, Canadian Pacific Railway.

March 2, 1909.—Inspection bridges, Cartier section, Lake Superior division, Canadian Pacific Railway.

March 2, 1909.—Inspection St. Catherine street bridge over the Canadian Pacific Railway yards at Hochelaga, Montreal, P.Q.

March 2, 1909.—Inspection location of transmission wires over the Canadian Pacific Railway tracks at Gomez street and Cartier and Talbot avenues, Winnipeg, Man.

March 2, 1909.—Inspection bridges and abutments on the Esquimalt and Nanaimo Railway (Canadian Pacific Railway) four bridges in all.

March 4, 1909.—Inspection bridges Lake Superior division, Soo branch of the Canadian Pacific Railway.

March 23, 1909.—Inspection Gravel Road crossing of the Grand Trunk Railway way, township of Johnson and Tarbutt.

March 4, 1909.—Inspection bridges Owen Sound section, Ontario division, Canadian Pacific Railway.

March 4, 1909.—Inspection bridges North Toronto branch, Canadian Pacific Railway.

March 6, 1909.—Inspection bridges Teeswater section, Ontario division, Canadian Pacific Railway.

March 6, 1909.—Inspection bridges Orangeville section, Ontario division, Canadian Pacific Railway.

March 8, 1909.—Inspection bridges, Port Burwell branch, Ontario division, Canadian Pacific Railway.

March 8, 1909.—Inspection transmission wires crossing of Canadian Pacific Railway by the Saraguay Electric Light and Power Company on Prud'homme avenue, Notre Dame de Grace, P.Q.

March 19, 1909.—Inspection proposed location of the Canadian Pacific Railway Pheasant Hills branch, for a siding near N.E. ¼ section 22-17-32, W. 1st, near Rocanville.

March 23, 1909.—Inspection gravel road crossing of the Grand Trunk Railway east of Morrisburg station.

March 23, 1909.—Inspection location of the Canadian Northern Ontario Railway from north side of Queen street to west side of Cherry street in the city of Toronto, for opening for traffic.

March 23, 1909.—Inspection Canadian Pacific Railway (McGregor-Varco branch) as to flooding of lands near Brookdale, Man.

March 24, 1909.—Inspection crossing of the Canadian Pacific Railway by the Hamilton Radial Railway near Lambton Mills, Ont.

March 25, 1909.—Inspection crossing of the town line road between Sandwich East and Sandwich West by the Michigan Central Railway and the Windsor, Essex and Lake Shore Rapid Railway.

March 26, 1909.—Inspection farm crossing of H. Dynes on the Hamilton Radial Railway one mile west of Burlington, Ont.

March 26, 1909.—Inspection crossings on the Canadian Northern Railway main line near Quill Lake, Sask.

March 26, 1909.—Inspection station on the Canadian Northern at Denholm, Sask.

March 26, 1909.—Inspection road crossings on the Canadian Northern Railway *re* complaint of local improvement district 18-B-3, near Nutana, Sask.

March 26, 1909.—Inspection crossing of the Michigan Central Railway by the Gravel road at the east end of Windsor yard, Ont.

May 27, 1909.—Inspection highway crossings, Local Improvement District 21-J-3 on the Canadian Northern Railway near Maymont, Sask.

March 29, 1909.—Inspection *re* complaint condition of level crossings on the Canadian Northern Railway, mileage 244 also condition of bridge near mileage 243.

March 29, 1909.—Inspection station platform at Togo, Sask., on the main line of the Canadian Northern Railway.

March 30, 1909.—Inspection Temiscouata Railway as to general conditions.

March 30, 1909.—Inspection highway crossing parish of Notre Dame du Lac on the line of the Temiscouata Railway.

March 30, 1909.—Inspection *re* dumping of snow from Victoria Jubliee bridge over the St. Lawrence river by the Grand Trunk Railway.

APPENDIX G.

REPORT OF THE INSPECTOR OF ACCIDENTS OF THE BOARD.

May 11, 1909.

DEAR SIR,—I beg to submit herewith report of the Accident and Equipment Department showing the number of persons killed and injured in train accidents during the period commencing April 1, 1908, and ending March 31, 1909, as per returns furnished by the railway companies in accordance with the Railway Act; and also giving a synopsis of the work done by the inspectors in connection with railway equipment and operation all over Canada.

During the above period 448 persons were killed and 1,201 were injured; they are classified as follows:—

	Killed.	Injured.
Passengers	26	227
Employees	191	769
Other persons	231	205
Totals	448	1201

Investigations were made by the Board's inspectors in 374 of the above cases and reports on the same were handed to the Board.

The inspectors have also made 300 reports relating to equipment in general, and 35 special reports relating to operation. A general inspection of stations and of crossings was also attended to.

Yours truly,

EUGENE A. PRIMEAU.

A. D. CARTWRIGHT, Esq.,
Secretary, B.R.C. Building.

SESSIONAL PAPER No. 20c

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

STATEMENT showing the number of persons killed and injured on various railways in Canada for year ending March 31, 1909.

NAME OF RAILWAY.	Passengers.		Employees.		Other Persons.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Grand Trunk	3	111	46	269	78	82	127	462
Canadian Pacific	18	47	120	158	113	84	251	289
Canadian Northern	1	8	7	170	8	17	16	195
Michigan Central		3	3	142	15	7	18	152
Michigan Central and Pere Marquette				1		2		3
Montreal Park and Island					1	1	1	1
Quebec, Montreal and Southern		6	1	3			1	9
St. Lawrence and Adirondack		2		1		1		4
Grand Trunk and Intercolonial				5	1		1	5
Windsor, Essex and Lake Shore Rapid Co			1		7	4	8	4
Central Vermont		1	1				1	1
Algoma Central			1				1	
Wabash		19	1	6	2		3	25
Bay of Quinte					1		1	
Alberta Ry. and Irrigation Co			1	1	1		2	1
British Columbia and Yukon Ry		1						1
Esquimalt and Nanaimo			1				1	
Thousand Island Ry. Co						1		1
Grand Trunk and Can. Pacific		4	1	2		1	1	7
Dominion Atlantic			1	3	1		2	3
New York and Ottawa (Ottawa and N.Y.)				1		1		2
Canadian Northern and Grand Trunk Pacific						1		1
Canadian Pacific and New York Central						1		1
Grand Trunk and Toronto Electric Ry			1	1			1	1
Great Northern			1				1	
Niagara, St. Catharines and Toronto			1				1	
Chatham, Wallaceburg and Lake Erie Electric Ry	4	22					4	22
Kingston and Pembroke		3						3
Moncton and Buctouche			1				1	
Canadian Northern, Ontario				1	1	1	1	2
Oxford Mountain			1				1	
Canadian Northern, Quebec			1		1	1	2	1
Temiscouata				1				1
Toronto, Hamilton and Buffalo					1		1	
Grand Trunk and Canadian Northern, Quebec				4				4
	26	227	191	769	231	205	448	1,201

STATEMENT Showing the Character of the Accidents Sustained by the Persons Killed and Injured on Various Railways in Canada, for Year ending March 31, 1909.

NAME OF RAILWAY.	Derailment.		Head-on Collision.		Stealing Ride.		While Shunting.		Level Crossing.		Falling off Freight Cars.		Trespassing.		Body found on Track or Bridge.		While Switching.		Pitch-in with Handcar.		Died on Train, Natural Cause.		Working under Car.		Struck Looking out of Cab Window.		Suicide.		Struck by Switchstand.		Adjust'g Couplers, Coupling and Uncoupling.		Passengers Falling off Passenger Trains.		Working on Track.		Working on Bridge.		Collision, Rear-end.	
	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I
Grand Trunk	2	61	6	27	...	7	1	3	18	30	5	22	32	26	17	...	8	26	...	1	...	...	...	1	...	5	3	...	...	4	4	32	...	4	4	12	...	...	3	21
Canadian Pacific	7	25	21	30	2	3	...	...	13	12	8	5	39	22	25	...	6	5	5	2	1	...	...	3	...	...	2	...	...	...	6	12	6	4	17	5	2	1	8	15
Canadian Northern	2	13	...	...	...	2	...	...	1	6	...	5	1	3	2	...	2	7	1	3	...	...	...	...	...	...	2	...	...	2	...	10	1	1	...	3	...	1	...	2
Michigan Central	...	2	...	...	...	...	...	2	6	3	...	3	5	2	3	...	...	1	...	...	...	...	...	...	...	...	...	...	1	2	...	6	...	...	...	3	...	...	...	...
Michigan Central and Pere Marquette	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Montreal Park and Island	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Quebec, Montreal and Southern	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
St. Lawrence and Adirondack	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Grand Trunk and Intercolonial	...	3	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Windsor, Essex and Lake Shore Rapid	...	4	...	...	...	...	...	...	2	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Central Vermont	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Algoma Central	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wabash	...	12	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bay of Quinte	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alberta Railway and Irrigation Co	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
BritishColumbiaandYukon	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Esquimalt and Nanaimo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thousand Island Ry. Co	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Grand Trunk and Canadian Pacific	...	...	1	6	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dominion Atlantic	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
New York and Ottawa	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

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STATEMENT Showing the Character of the Accidents Sustained by the Persons Killed and Injured on Various Railways in Canada, for Year ending March 31, 1909.

NAME OF RAILWAY.	Collision, Steam Car and Street Car.		Attempted to get on Trains while in motion.		Side Ladders.		Falling between Cars, Walking on top of Trains while in motion.		Fell off Work Train.		Falling off Hand-car.		Farm Crossing.		Bridge Burnt.		Collision with cars standing foul or in Yards.		Under Construction.		Working under Engine.		Locomotive Explosion.		Jumping off Train while in motion.		Washout.		Riding on Pilot of Engine.		Working on the Cars and Engine.		Overhead Bridge.		Fell off Tender in attempting to move Water Spout.		Working in Shop.		Falling off Bridge or Trestle.		Struck by Water Spout while in Motion.		Ran into Open Switch.		Unclassified.		Totals.	
	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I
Grand Trunk			2	13		3		1		2		1						7				1			2	16	1	6		1		2				6	1	4	1	1		2		2	17	110	127	462
Canadian Pacific			6	15		2	1	2			1	2				3		1	8	16	1	1	2		7	7	3			2					1	1	8	8	5			5	7	40	73	251	289
Canadian Northern				5		1						2							1	2						4				2						35	1	1				3	2	82	16	195
Michigan Central				3		1						3														7										50							3	64	18	152
Michigan Central and Pere Marquette				1																																											3
Montreal Park and Island																																													1	1
Quebec, Montreal and Southern				1																																								2	1	9
St. Lawrence and Adirondack																										1																		2		4
Grand Trunk and Intercolonial																													1															1	5
Windsor, Essex and Lake Shore Rapid													1																														1		8	4
Central Vermont			1																																									1	1
Algoma Central																																												1	
Wabash			1																																								12		3	25
Bay of Quinté																																												1	
Alberta Railway and Irrigation Co.																																												2	1
British Columbia and Yukon																																														1
Esquimalt and Nanaimo						1																																							1	
Thousand Island Ry. Co.																																														1
Grand Trunk and Canadian Pacific																																													1	
Dominion Atlantic																																								1				2	
New York and Ottawa																										1																				
Can. Northern and G.T.P.																																													

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THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

STATEMENT showing the character of accidents on various railways in Canada for year ending March 31st, 1909.

CHARACTER OF ACCIDENT.	Passengers.		Employees.		Other Persons.		Totals.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Derailment	1	87	10	40		4	11	131
Head-on collision	3	23	25	39		2	28	64
Stealing ride					2	12	2	12
While shunting			1	6			1	6
Level crossing					41	54	41	54
Falling off freight cars			12	36	3	2	15	38
Trespassing					83	57	83	57
Body found on track or bridge	1		1		47		49	
While switching	1		15	39	2	1	18	40
Pitch-in with hand car			6	6	2		8	6
Died on train, natural cause	1						1	
Working under cars				4				4
Struck looking out of cab window				5				5
Suicide	1		1		5		7	
Struck by switch stand			1	8			1	8
Adjusting couplers, coupling and uncoupling			11	60			11	60
Passengers falling off passenger trains	7	10					7	10
Working on track			22	23			22	23
Working on bridge			2	2			2	2
Collision rear end	7	50	8	14			15	64
Collision street car and steam car			1	1			1	1
Attempted to get on train while in motion	1	9	3	17	8	12	12	38
Side ladders				7				7
Falling between cars, walking on top of train while in motion			1	3	1		2	3
Fell off work train				2				2
Falling off hand car			1	8			1	8
Farm crossing					1		1	
Bridge burnt				3				3
Collision with cars standing foul or in yard		2		6				8
Under construction					9	18	9	18
Working under engine			1	2			1	2
Locomotive explosion			2				2	
Jumping off train while in motion	3	15	4	17	2	4	9	36
Wash out		4	4	2			4	6
Riding on pilot of engine				6				6
Working on the cars and engines				2				2
Overhead bridge				2				2
Fell off tender in attempting to move water spout				7				7
Working in shop			2	97			2	97
Falling off bridge or trestle			6	6	4	4	10	10
Struck by water spout while in motion				2				2
Ran into open switch		10	5	14			5	24
Unclassified		17	46	283	21	35	67	335
Totals	26	227	191	769	231	205	448	1,201

SESSIONAL PAPER No. 20c

COMPARATIVE STATEMENT of killed and injured beween year ending March 31, 1908, and year ending March 31, 1909.

	Passengers.		Employees.		Other Persons.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Year ending March 31, 1908	64	326	246	806	219	177	529	1,309
Year ending March 31, 1909	26	227	191	769	231	205	448	1,201
Increase over 1908	....	....	.....	....	12	28	.....	.....
Decrease over 1909	38	99	55	37	....	.....	81	108

COMPARATIVE STATEMENT in totals of killed and injured between year ending March 31, 1908, and year ending March 31, 1909, for each railway separately.

NAME OF RAILWAY.	1908.		1909.		1909. Increase.		1909. Decrease.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Grand Trunk	165	721	127	462			38	259
Canadian Pacific	283	341	251	289			32	52
Canadian Northern	19	123	16	195		72	3	
" Ontario	2	5	1	2			1	3
" Quebec	1	1	2	1	1			
Michigan Central	25	72	18	152		80	7	
Wabash	5	12	3	25		13	2	
Toronto, Hamilton and Buffalo	2		1				1	
Vancouver, Westminster and Yukon	1						1	
Central Vermont	1	6	1	1				5
Dominion Atlantic	1	3	2	3	1			
Great Northern	4	3	1				3	3
Central Ontario	2						2	
Quebec, Montreal and Southern	1	3	1	9		6		
Algoma Central and Hudson Bay	2	1					2	1
Pere Marquette	4	4					4	4
Atlantic and Lake Superior	1						1	
Montreal Terminal	1						1	
Quebec Central	3	2					3	2
Kingston-Pembroke	1	1		3		2	1	
Montreal Park and Island	1		1	1		1		
Vancouver, Victoria and Eastern Ry. and Nav. Co.	1						1	
International Transit Co.	1						1	
Bay of Quinte	1		1					
Quebec Railway Light and Power Co	1						1	
Grand Valley Electric Co		11						11
Michigan Central and Pere Marquette				3		3		
St. Lawrence and Adirondack				4		4		
Grand Trunk Intercolonial			1	5	1	5		
Windsor, Essex and Lake Shore Rapid Co.			8	4	8	4		
Algoma Central			1		1			
Alberta Railway and Irrigation Co			2	1	2	1		
British Columbia and Yukon				1		1		
Esquimalt and Nanaimo			1		1			
Thousand Island Railway Co				1		1		
Grand Trunk and Canadian Pacific			1	7	1	7		
New York and Ottawa				2		2		
Canadian Northern and G. T. P.				1		1		
Canadian Pacific and New York Central				1		1		
Grand Trunk and Toronto Electric			1	1	1	1		
Niagara, St. Catharines and Toronto			1		1			
Chatham, Wallaceburg and Lake Erie Electric Ry			4	22	4	22		
Moncton and Buctouche			1		1			
Oxford and Moncton			1		1			
Temiscouata				1		1		
Grand Trunk and Canadian Northern, Quebec				4		4		
	529	1,309	448	1,201				
Increase					24	232		
Decrease							105	340
Decrease for 1909							81	108

COLLISIONS INVESTIGATED DURING YEAR 1908-1909.

COLLISIONS.

Reference to Record.	Date Reported.	Date of Accident.	Name of Railway.	Place.	Killed.	Injured.	Cause of Accident.
No.	1908.	1908.					
584	April 1	Jan. 1	Grand Trunk	Allandale	....	1	Collision—Switchman allowed engine 546 to back up in face of extra 868; in yard.
2900							
600	" 7	Mar. 24	Grand Trunk	Simcoe, near	...	8	Collision, head-on. Train despatcher forgot about extra 198 and issued orders to engine 331, without first securing extra 198.
3214							
645	May 6	Feb. 3	Canadian Northern	Atikokan yard	....	2	Collision—Brakes were not applied in time to prevent cars striking car standing in siding.
2978							
647	" 12	Jan. 13	Canadian Northern	Kamsack yard	..	1	Collision—Switch set for siding instead of main line.
2892		1907.					
657	" 13	Dec. 22	Canadian Pacific	Brocket, ¼ mile west	1	6	Collision, head-on. Operator received and accepted order from the train despatcher after train had passed his station.
2850							
660	" 13	Nov. 26	Canadian Pacific	Hank, 2 miles east of	....	....	Collision, rear-end. Train ran into train ahead. Engineer did not regard the explosion of one torpedo.
2805		1908.					
673	" 26	May 11	Canadian Pacific	Parry Sound, 5 miles north	2	2	Collision, head-on. Supply train, engine 407, north bound, failed to await the arrival of the south bound ballast train at the lifting gang and proceeded without instructions.
704	June 16	April 16	Père Marquette	Leamington, ¾ miles west of	....	3	Collision, rear-end. No. 2 collided with rear of No. 60.
709	" 9	May 24	Ottawa Electric Ry.	Britannia line, near Barry's hotel	....	14	Collision, rear-end. Car No. 260 pitched into car Duchess of York.

COLLISIONS INVESTIGATED DURING YEAR 1908-1909—*Continued.*

Reference to Record.	Date Reported.	Date of Accident.	Name of Railway.	Place.	Killed.	Injured.	Cause of Accident.
No.	1907.	1908.					
711	" 16	" 29	Canadian Pacific.....	Owen Sound	2	8	Collision, head-on. Engine 1490 ran away from shop track on to main line and collided with passenger train No. 19.
3378							
727	July 2	" 28	Grand Trunk.....	Stratford Yard	....	1	Collision, broadside. Engine 456 collided with side of one car and rear of engine 46.
3388							
748	" 13	July 8	Grand Trunk...	London.....	....	14	Collision—Giving signal to No. 22 to enter London passenger station before making sure that switches were properly set.
3535							
756	" 27	June 19	Grand Trunk.....	Point St. Charles.....	....	2	Collision, rear-end. Switchman turned switch and let engine and six cars out on main line after engineer of No. 5 had received proceed signal.
3519							
760	" 31	July 27	Canadian Pacific	Homle Yard, east end.....	2	9	Collision, rear-end. Brakeman did not go far enough to protect his train, which was standing. He went only eight telegraph poles.
3599							
762	Aug. 6	" 18	Canadian Pacific.....	Port Arthur, 2 miles east....	....	4	Collision, head-on. Crew of freight extra forgot about No. 94, and on account of curve engineers did not see each other until it was too late.
3600							
765	July 30	" 9	Canadian Pacific.....	Medicine Hat, 1½ miles east..	7	5	Collision, head-on. Engineer did not examine train register before leaving Medicine Hat. Train No. 17 had not yet arrived.
3618							
769	Aug. 4	" 11	Grand Trunk.....	Toronto, Union Station.....	....	4	Collision—Engine 980 collided with forward end of train No. 12.
3585							
799	Sept. 25	Aug. 7	Canadian Pacific.....	Peart	1	....	Collision, head-on. Engine 1298, in charge of watchman, collided with a van coupled to engine 368.
3722							

816	Oct.	5	Sept.	26	Canadian Pacific.....	Islington..	1	3	Collision, head-on. No. 50 overran the east switch and collided with No. 55, which was stopped and about to pull into siding.
3816									
825	"	16	"	22	Canadian Pacific.....	Gilbert Station, 1 mile east..	....	2	Collision, rear-end. Failure of brakeman to obey a signal to stop when he ran over a torpedo.
3955									
826	"	16	"	23	Grand Trunk.....	Welland.....	....	....	Collision, rear-end. Failure of brakeman to properly protect his train.
827	"	16	Oct.	7	Grand Trunk and Toronto Electric Ry. Co.	Toronto, near John St.....	1	3	Collision, broadside. Motorman failed to stop and electric car struck side of freight train.
3889									
828	"	16	"	6	Grand Trunk.....	Burford, 2 miles east of.....	3	2	Collision, head-on. Between extra freight west engine 189 and pilot engine 483. The pilot engine was running tender first.
3892									
829	"	16	Sept.	23	Grand Trunk.	Clarkson	....	3	Collision, rear-end. Between extra trains east, engines 647 and 811. Weather very foggy.
3842									
830	"	16	Oct.	7	Grand Trunk.	London Yard...	1	...	Collision, broadside. Engineer of No. 48 failing to notice position of the switch ahead and running foul of east bound freight main line.
3891									
832	"	23	"	1	Grand Trunk and Canadian Pacific.	Mimico.	1	6	Collision—Switch left open ; switch set for siding instead of main line.
3840									
847	"	27	"	15	Canadian Pacific.....	Parry Sound.	....	....	Collision—Extra freight engine 371, standing on main track and passenger 94 approaching station.
854	Nov.	10	"	17	Canadian Pacific.....	Stickney.....	2	1	Collision, head-on. Extra No. 91 and extra 517. Engineer of No. 517 forgetting his meet order with 91 at Stickney.
3904									
864	"	27	Nov.	5	Grand Trunk.....	Bowmanville, 1¼ miles east of.	3	1	Collision, rear-end. No. 423 running at high rate of speed and coming upon engine 747 before the crew of the engine could be protected by flagman.
4043									
866	"	27	"	14	Canadian Pacific.....	Peterboro..... ..	....	3	Collision, rear-end. 1st No. 54 and No. 56. Failure of engineer of No. 1st 54 to notice position of distant semaphore.
4035									
868	"	30	"	23	Canadian Pacific.....	Sandbank, 25 miles west of Peterboro.	3	2	Collision, head-on. Switch set for siding instead of main line.
4100									

COLLISIONS INVESTIGATED DURING YEAR 1908-1909—*Continued.*

Reference to Record.	Date Reported.	Date of Accident.	Name of Railway.	Place.	Killed.	Injured.	Cause of Accident.
No.	1909.	1908.					
869	" 30	Oct. 24	Canadian Pacific	Virden Station	....	4	Collision—Switch set for siding instead of main line, but was noticed in time to prevent a more serious accident.
4010							
873	Dec. 3	Nov. 6	Grand Trunk	Danby	1	8	Collision, head-on. Failure of train No. 5 to stop at semaphore and extra 92 fouling east switch at east end of yard.
4045							
876	" 3	Aug. 10	Chatham, Wallaceburg & Lake Erie Electric Ry.	Chatham, Queen St	4	22	Collision, rear-end. Failure of motorman on car No. 8 to stop, colliding with rear of car No. 14 ahead.
4093							
880	" 9	Dec. 3	Canadian Pacific	Pembroke, 1 mile east of	1	5	Collision, head-on. Failure of engine 312 to clear for No. 78.
4132							
881	" 9	Nov. 30	Canadian Pacific	Bethany, Havelock Section	...	2	Collision, broadside. Failure to protect No. 798, which was 10 cars foul at the east end of siding, and giving No. 50 signal to proceed.
887	" 23	Dec. 7	Canadian Pacific	Fort William	2	....	Collision—Defective engine, escaping steam preventing engineer from seeing cars.
4203							
899	Jan. 16	Dec. 2	Grand Trunk	Prairie Siding	....	2	Collision—Train ran into open switch and struck cars standing on side track.
4191							
910	" 27	1909. Jan. 13	Canadian Pacific	Sidewood Station, near	2	2	Collision, rear-end. Conductor of extra 580 misread his orders, and ordered engineer to back up, colliding with approaching No. 76.
4392							
915	Feb. 5	" 26	Grand Trunk	Harriston, 3½ miles north	2	1	Collision, head-on. No. 584 extra freight. Train took wrong track at Harriston and collided with No. 311, engineer giving wrong signal for switch.
4362							

922	"	17	Feb.	12	Canadian Pacific.....	Hector Station..... ...	1	1	Collision—Failure of engineer and fireman to notice position of switch.
4407									
926	"	23	Jan.	14	Canadian Pacific	Missiwabi yard.....	1	...	Collision, rear end. Engineer disregarding yard limit board.
4259									
927	"	23	"	16	Canadian Pacific..	Kenogami.....	1	...	Collision, head-on. Conductor and engineer making a mistake of an hour in the time.
4259									
932	Mar.	6	Feb.	22	Canadian Pacific.. ...	Ingolf Station.....	2	1	Collision, rear-end. Engineer disregarding yard limit board.
4156									
933	"	8	"	23	Michigan Central & Père Marquette.	Springfield.....	....	1	Collision—Brakeman turned switch while P. M. train was inside of the block and had superior right through yard.
4396									
			1908.						
931	"	2	Dec.	16	Canadian Pacific.	Glen Sutton, 1¼ miles north..	1	6	Collision, head-on. Failure of conductor to comply with orders issued and failure of despatcher to issue orders to agent at meeting point.
4207									
			1909.						
936	"	13	Mar.	5	Canadian Pacific.. ...	Port Arthur Yards..... . ..	....	1	Collision—Disregard of yard limit board, and the man in charge of plough neglecting to give engineer signal.
4420									
940	"	16	Jan.	27	Canadian Pacific.....	Emerald Station	....	3	Collision, head-on. Not proper order delivered to engine crew at Field, and also engineer and fireman mistaking engine 1622 for engine 1620.
944	"	22	Mar.	10	Grand Trunk and Canadian Northern, Quebec.	Hawkesbury.....	....	2	Collision, head-on. Conductor of C.N.Q. engine failed to protect his engine, returning from G.T.R. south freight yard to C.N.Q. yard.
4462									
945	"	22	"	10	Canadian Northern	Brandon.....	...	2	Collision, rear-end. Disregarding of yard limit board.
4412-3									

DERAILMENTS INVESTIGATED DURING YEAR 1908–9.

DERAILMENTS.

Reference to Record.	Date of Report.	Date of Accidents.	Name of Railway.	Place.	Killed.	Injured.	Cause of Accidents.
No.	1908.	1908.					
595	Apr. 3	Feb. 26	Grand Trunk	Berlin, 1 mile south	....	1	Derailment—Caused by the accumulation of snow and ice on public crossing.
3111							
612	" 13	Jan. 15	Grand Valley Electric Ry	Paris	....	11	Derailment—Caused by snow on track.
3132							
617	" 21	Mar. 28	Grand Trunk	Seaforth, 4 miles south	...	2	Derailment—Culvert washed out on account of heavy rain during the night and early morning.
628	" 28	Feb. 15	Canadian Pacific	Kanaka Tunnel, mt. section	....	3	Derailment—Train ran into a rock slide.
631	" 28	1907. Dec. 7	Canadian Pacific	Hope (near) mt. section	....	2	Derailment—Train ran into a rock slide.
639	May 6	1908. Feb. 6	Can. Pacific	Winnipeg Yard	1	....	Derailment—Car left track on account of a piece of cord wood and ice on track.
3142							
641	" 6	Jan. 30	Canadian Northern	Dauphin Yard	...	7	Derailment—Breaking of engine truck spring, which broke apparently as engine was passing switch points.
3957–8 & 9							
654	Aug. 4	Feb. 26	Canadian Pacific	Lethbridge Jct	...	....	Derailment—Broken rail.
656	May 13	Mar 15	Canadian Pacific	Eagle (near)	...	2	Derailment—Ran into open switch, then work engine pitched into wreck.
665	" 1	Feb. 27	Canadian Northern	Port Arthur Yard	1	...	Derailment—Broken tire on the left leading driving wheel.
3060							

667	"	13	"	10	Canadian Pacific.....	Kenora Yard.....	....	2	Derailment—Train left rails at switch, cause unknown.
676	"	26	May	19	Canadian Northern	Cartier (near), between M.P. 12 & 13.	....	1	Derailment—Some of the brake gearing breaking and coming in contact with the tender truck wheels.
683	June	11	"	20	Niagara, St. Catharine & Toronto Elec. Ry.	Thorold	....	2	Derailment—Due to a broken flange on the forward wheel of the rear truck.
696	"	8	"	23	Canadian Pacific	Milestone, 3 miles west	....	1	Derailment—Broken flange on C.P.R. flat, first car ahead of caboose.
677	"	11	June	1	Canadian Pacific.....	Oxdrift, 10 tel. poles east....	....	1	Derailment—A sunkink in the rail
698	"	11	May	25	Canadian Pacific	Crandall, 1 mile east of.....	....	..	Derailment—Tender of engine left rails, derailing baggage, express, first and second class cars.
703	"	8	Feb.	5	Canadian Pacific.....	Molita, east switch.....	....	....	Derailment—Broken axle on the trailing tender wheels.
719	"	18	June	9	Wabash & Grand Trunk Joint System.	Stevensville, ½ mile west.....	....	13	Derailment—Tender of engine 1630 and six cars derailed. Cause unknown.
3429									
744	July	6	May	25	Canadian Pacific.....	Edison, 1 mile west Ignace section.	....	8	Derailment—Dump and track breaking away from the side of the hill as the train came to it.
746	"	6	Apr.	9	Canadian Pacific	McMillan, 1 mile east.....	1	....	Derailment—A loose boulder rolling down out of the side of a cut and remaining on the track.
3296									
752	"	10	June	21	Canadian Pacific	Wakami Station, near M. 91½ Chapleau section.	....	3	Derailment—Sun caused the rails to expand to such an extent that the rails kinked. Track out of line 3 feet.
3453									
753	"	18	July	15	Grand Trunk..	Gilford Station	1	2	Derailment—Cause unknown.
3580									
767	Aug.	4	"	26	Canadian Pacific	Pringle Station, 2 miles east.	....	...	Derailment—Cause unknown. Probably due to a sunkink.
776	"	15	June	14	Canadian Northern	Star City (near), M. P. 283..	.. .	1	Derailment—Soft piece of track on muskeg.
3433									
784	"	27	Aug.	22	Central Vermont.....	St. Lambert, 6 miles south...	....	3	Derailment—Tender left rails, causing the whole train to be derailed. Cause unknown.
3694									

DERAILMENTS INVESTIGATED DURING YEAR 1908-9.—*Continued.*

Reference to Record.	Date of Report.	Date of Accidents.	Name of Railway.	Place.	Killed.	Injured.	Cause of Accidents.
No.	1908.	1908.					
789	Sept. 12	Sept. 3	Grand Trunk.....	Gobels, ¼ mile west...	....	8	Derailment—Broken rail.
805	" 30	Aug. 6	Canadian Northern	Radisond, near M. 519	....	1	Derailment—Running faster than the condition of the track warranted.
3657							
810	Oct. 3	Sept. 14	Canadian Northern	M. 137 east	1	....	Derailment—Breaking of a rail joint. Due to speed in excess of that ordered by the company.
3794							
812	" 3	" 2	Canadian Pacific	M. 4, Pointe Fortune branch.	...	1	Derailment—The tender leading wheel of the leading truck breaking down.
3908							
829	" 6	Aug. 13	Grand Trunk.....	Kilworthy & Koshee (betw'n)	...	2	Derailment—Eight cars derailed. Cause unknown.
3715							
821	" 9	Sept. 22	Canadian Pacific.....	Austin Station..	....	....	Derailment—Wheel broke under third car of first 76; second 76 collided with wreckage of first section.
842	" 22	Oct. 15	Grand Trunk.	Allandale, 1 mile north.....	....	6	Derailment—The three rear cars of No. 42 derailed. Cause unknown, probably due to a sunkink caused by first part of train.
3954							
860	Nov. 10	" 24	Canadian Northern	M. 43, Port Arthur section..	1	1	Derailment—Engine derailed. Too high rate of speed with heavy power on light steel.
3950-& 1							
867	" 27	Nov. 18	Grand Trunk.....	Ottawa South, Rideau Jct...	1	1	Derailment—Train left track at switch.
4111							

820	"	27	Oct.	16	Canadian Pacific.....	Bear Creek	....	3	Derailment—Connecting rod on the switch became disconnected and allowed points to shift.
4009									
878	Dec.	3	Nov.	14	Canadian Northern	Winnipeg West Yard..	....	1	Derailment—Broken switch rod.
4069									
905	1909. Jan.	20	Dec.	31	Canadian Pacific.. . ..	Gull Lake, 4 miles west	1	8	Derailment—Breaking of a defective steel rail.
4275									
908	"	26	1909. Jan.	14	Grand Trunk....	Gourock, 1 mile south.....	....	30	Derailment—Tire coming off one of the wheels.
4313									
909	"	25	1908. Nov.	18	Kingston & Pembroke..	M. 56, near Sharbot Lake ...	....	4	Derailment—Spreading of a rail on a 20 degree curve on 1¼ inch elevation.
4094 5 & 6									
923	Feb.	18	1909. Jan.	14	Canadian Pacific.....	Three Valley Station	2	....	Derailment—Train ran into snow slide.
4333									
930	"	23	"	15	Canadian Pacific.....	Sailor Bar Bluff, M. 19·4 ...	2	43	Derailment—Trying to run through snow slide.
4358									
939	Mar.	17	"	21	Canadian Pacific.... ..	Andover, north of 1½ miles ..	....	4	Derailment—Broken rail on the inside of curve.
4320									
946	"	29	Mar.	19	Canadian Northern	Regina (nr.) Regina-Prince Albert branch.	...	...	Derailment—Broken rail.
							...	....	

APPENDIX H.

RULES AND REGULATIONS OF THE BOARD.

Since the publication of the last annual report, the following amendments have been made to the Board's Rules and Regulations: On the 1st April, 1908, Rule 1 was rescinded and the following substituted therefor:

1. Regular sittings of the Board will be held at the Court Room, Ottawa, at 10 a.m., on the first Tuesday of every month for the hearing of matters, applications or complaints.

(a) In addition to its regular sittings, the Board may appoint special sittings at Ottawa or elsewhere.

7. (a) Any party to any matter, application or complaint pending before the Board may set the same down for hearing at the next monthly sitting of the Board upon giving at least ten days, or shorter notice as the Board may order, to all parties interested.

(b) When contested matters, applications or complaints are ready for hearing, and are not at once set down by any party interested, the secretary shall set the same down for the first sitting commencing after the expiration of ten days (or such shorter notice as the Board may order) from the date of such setting down.

(c) When a matter, application or complaint is set down for hearing by the secretary, he shall give ten days' notice of hearing (or such shorter time as the Board may order) to all parties interested.

On the 26th January, 1909, the following general regulations affecting highway crossings were approved.

GENERAL REGULATIONS AFFECTING HIGHWAY CROSSINGS.

1. That, unless otherwise ordered by the Board, the width of approaches to rural railway crossings over highways be twenty feet road surface on concession and main roads and sixteen feet on side and bush roads.

2. That a strong, substantial fence, or railing, four feet six inches high, with a good post-cap (four inches by four inches, a middle piece of timber (one and a half inches by six inches), and a ten-inch board firmly nailed to the bottom of the posts to prevent snow from blowing off the elevated roadway, be constructed on each side of every approach to a rural railway crossing where the height is six feet or more above the level of the adjacent ground—leaving always a clear road-surface twenty feet wide.

3. That the width of approaches to rural railway crossings made in cuttings be not less than twenty feet clear from bank to bank.

4. That, unless otherwise ordered by the Board, the planking or paving blocks, or broken stone topped with crushed rock screenings, on rural railway crossings over highways (between the rails and for a width of at least eight inches on the outer sides thereof) be twenty feet long on concession and main roads and sixteen feet on side and bush roads.

RULES AND REGULATIONS—MAY 1, 1909.

MEETING AT OTTAWA, MONDAY, THE 19TH DAY OF APRIL, A.D. 1909.

The Board, in virtue of the provisions of the Railway Act, hereby makes the following rules and regulations:—

PUBLIC SESSIONS.

1. For the hearing of matters, applications or complaints other than those relating to rates and traffic matters, a sittings will be held at the offices of the Board at Ottawa, Ontario, at 10 a.m., on the first Tuesday in every month, and for hearing all matters, applications and complaints relating to rates and traffic matters, a sittings will be held at the place and hour aforesaid on the third Tuesday in every month.

(*a*) In addition to its regular sittings, the Board may appoint special sittings at Ottawa and elsewhere.

INTERPRETATION.

2. In the construction of these rules, and the forms herein referred to words importing the singular number shall include the plural, and words importing the plural number shall include the singular number; and the following terms shall (if not inconsistent with the context or subject) have the respective meanings hereinafter assigned to them; that is to say, 'Application' shall include complaint under this Act; 'Respondent' shall mean the person or company who is called upon to answer to any application or complaint; 'Affidavit' shall include affirmation; and 'Costs' shall include fees, counsel fees and expenses.

APPLICATION OR COMPLAINT.

3. Every proceeding before the Board under this Act shall be commenced by an application made to it, which shall be in writing and signed by the applicant or his solicitor; or in case of a corporate body or company being the applicants shall be signed by their manager, secretary or solicitor. It shall contain a clear and concise statement of the facts, the grounds of application, the section of the Act under which the same is made, and the nature of the order applied for, or the relief or remedy to which the applicant claims to be entitled. It shall be divided into paragraphs, each of which, as nearly as possible, shall be confined to a distinct portion of the subject, and every paragraph shall be numbered consecutively. It shall be endorsed with the name and address of the applicant, or if there be a solicitor acting for him in the matter, with the name and address of such solicitor. The application shall be according to the forms in schedule No. 1.

The application, so written and signed as aforesaid, shall be left with or mailed to the secretary of the Board, together with a copy of any document, or copies, of any maps, plans, profiles, and books of reference, as required under the provisions of the Act, (a) referred to therein, or which may be useful in explaining or supporting the same. The secretary shall number such applications according to the order in which they are received by him, and make a list thereof. From the said list there shall be made up a docket of cases for hearing which, as well as their order of entry on the docket, shall be settled by the Board. Said docket list when completed to be put upon a notice board provided for that purpose, which shall be open for inspection at the office of the secretary during office hours.

ANSWER.

4. Unless the Board otherwise directs, the respondent or respondents shall mail or deliver to the applicant, or his solicitor, a written statement containing in a clear and concise form their answer to the application, and shall also leave or mail a copy thereof with or to the secretary of the Board at its office, together with any documents that may be useful in explaining or supporting it. The answer may admit the whole or any part of the facts of the application. It shall be divided into paragraphs, which shall be numbered consecutively, and it shall be signed by the person making the same, or his solicitor. It shall be endorsed with the name and address of the respondents, or if there be a solicitor acting for them in the matter, with the name and address of such solicitor. It shall be according to the form in schedule No. 2.

(*a*) The time limit for filing and delivery of answer shall be as follows: Where the subject matter of the complaint arises east of Port Arthur, Ont., fifteen days; between Port Arthur and the western boundary of the province of Saskatchewan, twenty days; and west thereof, thirty days.

(*a*) For further particulars of plans, &c., see regulations in Appendix.

REPLY.

5. Within four days from the delivery of the answer to the application, the applicant shall mail or deliver a reply thereto to the respondents, and a copy thereof to the Secretary of the Board, and may object to the said answer as being insufficient, stating the ground of such objection, or deny the facts stated therein, or may admit the whole or any part of said facts. The reply shall be signed by the applicant or his solicitor, and may be according to form No. 3 in the said schedule.

The Board may, at any time, require the whole or any part of the application, answer or reply, to be verified by affidavit, upon giving a notice to that effect to the party from whom the affidavit is required; and if such notice be not complied with the application, answer or reply may be set aside, or such part of it as is not verified according to the notice may be struck out.

SUSPENSION OF PROCEEDINGS.

6. The Board may require further information, or particulars, or documents from the parties, and may suspend all formal proceedings until satisfied in this respect.

If the Board, at any stage of the proceedings, think fit to direct inquiries to be made under any of the provisions of this Act, it shall give notice thereof to the parties interested, and may stay proceedings or any part of the proceedings thereon accordingly.

NOTICE.

7. In all proceedings under this Act, where notice is required, a copy or copies of said proceeding, or proceedings, for the purpose of service, shall be endorsed with notice to the parties in the forms of endorsement set forth in schedules Nos. 1 and 2; and in default of appearance the Board may hear and determine the application *ex parte*.

Endorsements shall be signed in accordance with the provisions of section 41.

The Board may enlarge or abridge the periods for putting in the answer or reply and for hearing the application, and in that case the period shall be endorsed in the notice accordingly.

Except in any case where it is otherwise provided, ten days' notice of any application to the Board, or of any hearing by the Board, shall be sufficient; unless, in any

case, the Board directs longer notice. The Board may, in any case, allow notice for any period less than ten days, which shall be sufficient notice as if given for ten days or longer. (Section 43.)

Notice may be given or served as provided by section 41 of the Act.

When the Board is authorized to hear an application or make an order, upon notice to the parties interested, it may, upon the ground of urgency, or for other reason appearing to the Board to be sufficient notwithstanding any want of or insufficiency in such notice, make the like order or decision in the matter as if due notice had been given to all parties; and such order or decision shall be as valid and take effect in all respects as if made on due notice; but any person entitled to notice, and not sufficiently notified, may, at any time within ten days after becoming aware of such order or decision, or within such further time as the Board may allow, apply to the Board to vary, amend, or rescind such order or decision; and the Board shall thereupon, on such notice to all parties interested as it may in its discretion think desirable, hear such application, and either amend, alter, or rescind such order or decision, or dismiss the application, as may seem to it just and right. (Section 45.)

(*a*) Any party to any matter, application, or complaint pending before the Board may set the same down for hearing at the next monthly sitting of the Board, upon giving at least ten days, or such shorter notice as the Board may order, to all parties interested.

(*b*) When contested matters, applications, or complaints are ready for hearing, and are not at once set down by any party interested, the Secretary shall set the same down for the first sittings commencing after the expiration of ten days (or such shorter notice as the Board may order) from the date of such setting down.

(*c*) When a matter, application, or complaint is set down for hearing by the Secretary, he shall give ten days' notice of hearing (or such shorter time as the Board may order) to all parties interested.

CONSENT CASES.

8. In all cases the parties may, by consent in writing with the approval of the Board, dispense with the form of proceedings herein mentioned, or some portion thereof.

9. If it appears to the Board at any time that the statements in the application, or answer, or reply do not sufficiently raise or disclose the issues of fact in dispute between the parties, it may direct them to prepare issues, and such issues shall, if the parties differ, be settled by the Board.

PRELIMINARY QUESTIONS OF LAW.

10. If it appear to the Board at any time that there is a question of law which it would be convenient to have decided before further proceeding with the case, it may direct such question to be raised for its information, either by special case or in such other manner as it may deem expedient, and the Board may, pending such decision, order the whole or any portion of the proceeding before the Board in such matter, to be stayed.

PRELIMINARY MEETING.

11. If it appear to the Board at any time before the hearing of the application that it would be advantageous to hold a preliminary meeting for the purpose of fixing or altering the place of hearing, determining the mode of conducting the inquiry, the admitting of certain facts or the proof of them by affidavit, or for any other purpose, the Board may hold such meeting upon such notice to the parties as it deems sufficient, and may thereupon make such orders as it may deem expedient.

PRELIMINARY EXAMINATION WITH THE PARTIES.

12. The Board may, if it thinks fit, instead of holding the preliminary meeting, provided for in Rule 11, communicate with the parties direct, and may require answers to such inquiries as it may consider necessary.

PRODUCTION AND INSPECTION OF DOCUMENTS.

13. Either party shall be entitled, at any time, before or at hearing of the case, to give notice in writing to the other party in whose application, or answer, or reply reference was made to any document, to produce it for the inspection of the party giving such notice, or his solicitor, and to permit him to take copies thereof; and any party not complying with such notice shall not afterwards be at liberty to put in such documents in evidence on his behalf in said proceedings, unless he satisfy the Board that he had sufficient cause for not complying with such notice.

NOTICE TO PRODUCERS.

14. Either party may give to the other a notice in writing to produce such documents as relate to any matter in difference (specifying the said documents), and which are in the possession or control of such other party; and if such notice be not complied with, secondary evidence of the contents of the said documents may be given by or on behalf of the party who gave such notice.

15. Either party may give to the other party a notice in writing to admit any documents, saving all just exceptions, and in case of neglect to admit, after such notice, the cost of proving such documents shall be paid by the party so neglecting or refusing, whatever the result of the application may be; unless, on the hearing, the Board certifies that the refusal to admit was reasonable; and no costs of proving any document shall be allowed, unless such notice be given, except where the omission to give the notice is, in the opinion of the Board, a saving of expense.

WITNESSES.

16. The attendance and examination of witnesses, the production and inspection of documents, shall be enforced in the same manner as its now enforced in a Superior Court of Law; and the proceedings for that purpose shall be in the same form, *mutatis mutandis,* and they shall be sealed by the Secretary of the Board with the seal and may be served in any part of Canada. (Section 26.)

Witnesses shall be entitled, in the discretion of the Board, to be paid the fees and allowances prescribed by schedule No. 4, annexed hereto.

THE HEARING.

17. The witnesses at the hearing shall be examined *viva voce;* but the Board may, at any time, for sufficient reason, order that any particular facts may be proved by affidavit, or that the affidavit of any witnesses may be read at the hearing on such conditions as it may think reasonable; or that any witnesses whose attendance ought, for some sufficient reason, to be dispensed with, be examined before a Commissioner appointed by it for that purpose, who shall have authority to administer oaths, and before whom all parties shall attend. The evidence taken before such Commissioner shall be confined to the subject-matter in question, and any objection to the admission of such evidence shall be noted by the Commissioner and dealt with by the Board at the hearing. Such notice of the time and place of examination as is prescribed in the order shall be given to the adverse party. All examinations taken in pursuance of any

of the provisions of this Act, or of these rules, shall be returned to the Court; and the depositions certified under the hands of the person or persons taking the same may, without further proof, be used in evidences, saving all just exceptions. The Board may require further evidence to be given either *viva voce* or by deposition, taken before a Commissioner or other person appointed by it for that purpose.

The Board may, in any case when deemed advisable, require written briefs to be submitted by the parties.

The hearing of the case, when once commenced, shall proceed, so far as in the judgment of the Board may be practicable, from day to day.

JUDGMENT OF THE BOARD.

18. After hearing the case the Board may dismiss the application, or make an order thereon in favour of the respondents, or reserve its decision, or (subject to the right of appeal in the Act mentioned) make such other order on the application as may be warranted by the evidence and may seem to it just.

The Board may give verbally or in writing the reasons for its decisions. A copy of the order made thereon shall be mailed or delivered to the respective parties. It shall not be necessary to hold court merely for the purpose of giving decisions.

Any decision or order made by the Board under this Act may be made an order of the Exchequer Court, or a rule order, or decree of any Superior Court of any province of Canada, and shall be enforced in like manner as any rule, order, or decree of such court. To make such decision or order a rule, order or decree of such court, the usual practice and procedure of the court in such matters may be followed, or in lieu thereof the form prescribed in subsection 2, section 46, of the Act.

The Board shall with respect to all matters necessary or proper for the due exercise of its jurisdiction under this Act, or otherwise for carrying this Act into effect, have all such powers, rights and privileges as are vested in a Superior Court. (Section 26.)

ALTERATION OR RESCINDING OF ORDERS.

19. Any application to the Board to review, rescind, or vary any decision or order made by it shall be made within thirty days after the said decision or order shall have been communicated to the parties, unless the Board think fit to enlarge the time for making such application, or otherwise orders.

APPEAL.

20. If either party desire to appeal to the Supreme Court of Canada from the decision or order of the Board upon any question which, in the opinion of the Board, is a question of law, he shall give notice (*c*) thereof to the other party and to the Secretary, within fourteen days from the time when the decision or order appealed from was made, unless the Board allows further time, and shall in such notice state the grounds of the appeal. The granting of such leave shall be in the discretion of the Board.

For procedure upon such leave being obtained see section 56, subsection 4 *et seq.* of the Act.

An appeal shall lie from the Board to the Supreme Court of Canada upon a question of jurisdiction; but such appeal shall not lie unless the same is allowed by a judge of the said court upon application and hearing the parties and the Board.

The costs of such application shall be in the discretion of the judge.

INTERIM EX PARTE ORDERS.

21. Whenever the special circumstances of any case seem to so require, the Board may make an Interim *ex parte* order requiring or forbidding anything to be done which the Board would be empowered upon application, notice and hearing to authorize, require or forbid. No such Interim Order shall, however, be made for a longer time than the Board may deem necessary to enable the matter to be heard and determined. (Section 49.)

AFFIDAVITS.

22. Affidavits of service according to the form No. 6 shall forthwith, after service, be filed with the Board in respect of all documents or notices required to be served under these rules; except when notice is given or served by the Secretary of the Board, in which case no affidavit of service shall be necessary.

All persons authorized to administer oaths to be used in any of the Superior Courts of any province, may take affidavits to be used on any application to the Board.

Affidavits used before the Board, or in any proceeding under this Act, shall be filed with the secretary of the Board at its office.

Where affidavits are made as to belief, the grounds upon which the same are based must be set forth.

(c) For form of notice see Form No. 5 in the Schedule hereto.

COMPUTATION OF TIME.

23. In all cases in which any particular number of days, not expressed to be clear days, is prescribed by this Act, or by these rules, the same shall be reckoned exclusively of the first day and inclusively of the last day, unless the last day shall happen to fall on a Sunday, Christmas Day or Good Friday, or a day appointed for a public fast or thanksgiving in the Dominion or any of the provinces, in which case the time shall be reckoned exclusively of that day also.

ADJOURNMENT.

24. The Board may, from time to time, adjourn any proceedings before it.

AMENDMENT.

25. The Board may at any time allow any of the proceedings to be amended, or may order to be amended or struck out any matters which, in the opinion of the Board, may tend to prejudice, embarrass or delay a fair hearing of the case upon its merits; and all such amendments shall be made as may, in the opinion of the Board, be necessary for the purpose of hearing and determining the real question in issue between the parties.

FORMAL OBJECTIONS.

26. No proceedings under this Act shall be defeated or affected by any technical objections or any objections based upon defects in form merely.

PRACTICE OF EXCHEQUER COURT WHEN APPLICABLE.

27. In any case not expressly provided for by this Act, or these rules, the general principles of practice in the Exchequer Court may be adopted and applied, at the discretion of the Board, to proceedings before it.

COSTS.

28. The costs of and incidental to any proceedings before the Board shall be in the discretion of the Board, and may be fixed in any case at a sum certain, or may be taxed. The Board may order by whom and to whom the same are to be paid, and by whom the same are to be taxed and allowed.

Schedule No. 1.

(FORMS OF APPLICATION.)

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Application No. (This No. is to be filled in by the Secretary on receipt.)

A. B. of C. D. hereby applies to the Board for an order under sections 252-253 of the Railway Act, directing the Railway Company to provide and construct a suitable farm crossing where the company's railway intersects this farm in Lot Con. Tp. County of Ontario, and states—

1. That he is the owner of the land, &c.
2. That by reason of the construction of the said railway he is deprived, &c.
3. That it is necessary for the proper enjoyment of his said land, &c.

Dated this day of , A.D.19 .

(Signed A. B.)

Endorsements.

The within application is made by A.B. of (state address and occupation) or by C. D. of , his solicitor.

Take notice that the within named Railway Company is required to file with the Board of Railway Commissioners within ten days from the service hereof, its answer to the within application.

FORM OF APPLICATION.

(Where no Notice Required.)

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Application No.

The Railway Company hereby applies to the Board for an Order under section 167 of the Railway Act, sanctioning the plans, profiles and books of reference submitted in triplicate herewith, showing a proposed deviation of its line of railway as already constructed between and , mileage to .

Dated this day of , A.D. 19 .

Schedule No. 2.

(FORM OF ANSWER.)

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

In the matter of the Application, No. of A.B. for an order under sections 252-253 of the Railway Act, directing Railway Company to provide a farm crossing.

The said Company in answer to the said application states:—

1. That the said A. B. is not the owner, but merely, &c.

2. That upon the acquisition of the right of way of the said Railway, A. B. was duly paid for and released, &c.

3. That the said A. B. has other safe and convenient means, &c.

4. That, &c.

Dated, &c.

Endorsements.

The within answer is made by A. B. of (state address and occupation) or by C. D. of , his solicitor.

Take notice that the within named Applicant is required to file with the Board of Railway Commissioners within four days from the service hereof, his reply to the within answer.

Schedule No. 3.

(Reply.)

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

In the matter of the application of A. B. against the Company.

The said A. B., in reply to the answer of the said Company states that:—

1.

2. And the said A. B. admits that

Dated this day of , A.D. 19 .

(Signed Q.)

Schedule No. 4.

(Fees and Allowances to Witnesses.)

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

To witnesses residing within three miles of the Court-room, per diem (not including ferry and meals)	$1 00
Barristers, attorneys, and physicians, when called upon to give evidence in consequence of any professional services rendered by them, or to give professional opinion, per diem.	5 00
Engineers, surveyors and architects, when called upon to give evidence of any professional services rendered by them, and to give evidence depending upon their skill and judgment, per diem	5 00

If the witnesses attend in one case only, they will be entitled to the full allowance. If they attend in more than one case, they will be entitled to a proportionate part in each case only.

When witnesses travel over three miles they shall be allowed expenses according to the sum reasonably and actually paid, when in no case shall exceed twenty cents per mile one way.

Schedule No. 5.

(Notice of Appeal.)

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

In the matter of the application No. , of A.B., for an order under sections 252-253 of the Railway Act, authorizing the Railway, &c., &c.

To the Board of Railway Commisioners,
and
To

The above named Applicant (or Respondent, as the case may be).

Take notice that the Company will apply to the Board on the day of , (not exceeding 14 days from the date thereof), for leave to appeal to the Supreme Court of Canada from the Order of the Board, dated the day of , in the matter of the above application authorizing the expropriation of certain lands referred to in said Order, and directing that compensation or damages to be awarded to the owners of said lands, or persons interested therein, shall be ascertained as and from the date of the application (or such other time as may be named in this Order).

The grounds of appeal are that as a matter of law, the awarding of such compensation or damages should be ascertained and deterimined from the date of the deposit of plan, profile, &c., as provided under section 192 of the Act, and not from the time stated in the Order.

Dated this day of

Signed,

Solicitor, &c.

Schedule No. 6.

(Form of Affidavit of Service.)

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

In the matter of the application No. A.B., for an Order under sections 252-253 of The Railway Act, directing Railway Company to provide a farm crossing.

I, of the City of Ottawa, &c., make oath and say:—

1. That I am a member, &c.

2. That I did on 19, serve the (C.P.) Railway Company above names, with a true copy of the (application of the said (A.B.) in this matter by delivering the same to (C.D.), the (Secretary) of the said Company, (or to E.F., the Asst. to the Gen. Mgr.) of the Company, being an adult person in the employ of the Company, at the head office of the Company in (Montreal) see section 41 (*a*), which said copy was endorsed with the following notice, viz.:—

(Copy exactly.)

Sworn, &c.

Requirements on Application having Reference to Plans.

No. 1.—General Location of Railway.—Section 157.

Send to secretary of the Department of Railways and Canals: 3 copies of *map* showing the general location of the proposed line of railway, the termini and the principal towns and places through which the railway is to pass, giving the names thereof, the railways, navigable streams and tide-water, if any, to be crossed by the railway,

and such as may be within a radius of thirty miles of the proposed railway, and generally the physical features of the country through which the railway is to be connected.

1st copy to be examined and approved by the Minister and filed in the Department of Railways and Canals.

2nd copy to be approved by Minister for filing by the Minister with the Board.

3rd copy to be approved by Minister for the Company.

Scale of Map—not less than 6 miles to the inch.

No. 2.—Plan, Profile, &c., of Located Line.—Section 159.

Upon approved general location map being filed by the Minister with the Board, send to the Secretary of the Board three sets of plans, prepared exactly in accordance with the 'general notes'* as follows:—

1st set—{ 1 plan. / 1 profile. / 1 book of reference. } For sanction and deposit with the Board.

2nd set—Same as 1st. { To be certified as copy of original and returned to the Company for registration.

3rd set—Same as 1st. { To be certified as copy of original and returned to Company.

Scale—Plans—400 feet to the inch.

Profiles. { Horizontal, 400 feet. / Vertical, 20 feet.

(N.B.—In prairie country, scale may be 1,000 feet to the inch.)

No. 3.—To Alter Location of Curves or Grades of Line Previously Sanctioned or Completed.—Section 167.

Send to the secretary of the Board three sets of plans, profiles and books of reference as required in No. 2.

(N.B.—The plans and profiles so submitted will be required to show the original location, grades and curves and railway highway and farm crossings, and the changes desired or necessitated in any of these, giving reason for same. Upon completion of the work application must be made to the Board for leave to operate.

Scale—Same as No. 2.

No. 4.—Plans of Completed Railway.—Section 164.

Send to the Secretary of the Board within six months after completion three sets of plans and profiles of the completed road.

1st set to be filed with the Board.

2nd set to be certified as copy of plan filed, and returned to the Company.

3rd set to be certified as copy of plan filed. To be returned to the Company for registration purposes.

Scale—Same as No. 2.

No. 5.—To take Additional Lands for Stations, Snow Protection, &c.—Section 178.

Send to the secretary of the Board three sets of plans and documents as follows:—

1st set— { 1 application sworn to by officers required to sign and certify plans. See 'General Notes.' / 1 plan, 1 profile. / 1 book of reference. } To be examined and certified and deposited with Board.

* General Notes, see pages 17 and 18.

2nd set—Same as 1st. { For certificate and return for registration, with duplicate authority.

3rd set—Same as 1st. { For certificate and return to Company, with copy of authority.

Scale—Same as No. 2.

N.B.—Ten days' notice of application must be given by the applicant Company to the owner or possessor of the property, and copies of such notice with affidavits of service thereof must be furnished to the Board on application.

No. 6.—Branch Lines, not exceeding six miles—Sections 221-225.

Where a branch line runs directly from the right of way of the railway Company on to the property of any person requiring such a line, the four weeks' public notice of application to the Board may be dispensed with. The Company must, however, furnish the consent of the owner of the land to the construction of the branch line. (*a*) 1 plan, profile and book of reference same as No. 2 to be deposited in Registry Office.

Upon such registration four weeks' public notice of application to the Board to be given.

Where such a branch crosses a highway, consent of municipality must be furnished with application, or evidence of service of 10 days' notice to the municipality with copies of application and plans accompanying same.

Send to the secretary of the Board an application with copies of the plan, profile and book of reference certified by the Registrar as a duplicate of those so deposited in the Registry Office.

After the Board has approved of the plan, &c., a certified copy of the Order authorizing the construction of the branch lines to be registered together with any papers and plans showing changes directed by the Board.

A map showing the adjacent country, neighbouring lines, &c., must be sent to the secretary of the Board with the application.

Proof of registration, and of public notice except as above mentioned having been duly given will be required upon the application.

Scale—Same as No. 2.

No. 7—Railway Crossings or Junctions.—Section 227.

Send to the secretary of the Board with an application three sets of plans and profiles of both roads on either side of the proposed crossing for a distance of one mile in each direction.

Scale—Plan—400 feet to the inch.

Profile. { 400 feet to inch horizontal. 20 feet to inch vertical.

1st set approved by and filing with the Board.

2nd and 3rd sets to be certified and furnished to the respective companies concerned, with certified copy of order.

The applicant Company must give ten days' notice of application to the company whose lines are to be crossed or joined, and shall serve with such notice a copy of all plans and profiles and a copy of the application. Upon completion of work application must be made to the Board for leave to operate.

No. 8—Highway Crossing—Sections 235 to 243.

Send to the secretary of the Board with an application three sets of plans and profiles of the crossings.

Scale—Plan—400 feet to inch.

Profile. { 400 feet to an inch horizontal. 20 feet to an inch vertical.

Profile of highway. { 100 feet to an inch horizontal. / 20 feet to an inch vertical.

1st set for approval by and filing with the Board.

2nd and 3rd sets to be furnished to the respective parties concerned, with a certified copy of the order approving the same.

The plan and profile shall show at least one-half a mile of the railway each way and 300 feet of the highway on each side of the crossing.

Plan must show intervening obstructions to the view from any point on the highway within 100 feet of the crossing to any point on the railway within one-half mile of said crossing.

If the company prefers, the above information may be shown on the location plan, and this plan may be used in connection with its application for approval of the highway crossing.

The applicant must give ten days' notice of the application and copies of plan to the municipality in which the proposed crossing lies, and furnish Board with proof of service.

1. That, unless otherwise ordered by the Board, the width of approaches to rural railway crossings over highways be twenty feet road surface on concession and main roads and sixteen feet on side and bush roads.
2. That a strong, substantial fence, or railing, four feet six inches high, with a good post-cap (four inches by four inches), a middle piece of timber (1½ inches by 6 inches), and a ten-inch board firmly nailed to the bottom of the posts to prevent snow from blowing off the elevated roadway, be constructed on each side of every approach to a rural railway crossing where the height is six feet or more above the level of the adjacent ground—leaving always a clear road-surface twenty feet wide.
3. That the width of approaches to rural railway crossings made in cuttings be not less than twenty feet clear from bank to bank.
4. That, unless otherwise ordered by the Board, the planking, or paving blocks, or broken stone topped with crushed rock, screenings, on rural railway crossings over highways (between the rails and for a width of at least eight inches on the outer sides thereof) be twenty feet long on concession and main roads and sixteen feet on side and bush roads.

No. 9—Crossings with Telegraph, Telephone or Power Wires.—Section 246.

Send to the secretary of the Board, with the application, a plan and profile in triplicate. The plan must show the location of the track or tracks to be crossed, the location of poles and their perpendicular distance from the track. The profile must show the height of poles, distance between the wires and the rails, and between the different lines of wires.

In the case of crossings with power wires, the details of construction and the method of protection must be shown.

A copy of the plan and profile must be sent to the railway company with notice of application.

In the case of power crossings, application to operate must be made to the Board upon completion of the work.

No. 10.—Crossing with Pipes for Drains, Water Supply, Gas, &c.—Section 250.

Send to the secretary of the Board, with the application, a plan and profile in triplicate. The plan must show the track or tracks proposed to be crossed. The profile must show the distance between the pipe and the base of rail, the size of

the pipe, and the material of which it is constructed. A copy of the plan and profile must be sent to the railway company with notice of application.

No. 11.—Crossings and Works upon Navigable Waters, Beaches, &c.—Section 233.

Upon site and general plans being submitted to Department of Public Works and being approved by the Governor in Council, sent to the secretary of the Board:—Certified copy of Order in Council with plans and description approved thereby and so certified—one application and two sets of detail plans, profiles, drawings and specifications.

The plans must show details of construction of piers and their foundations, also details of superstructure, if standard plan of the same has not already been approved.

The profile must show the cross-section of the river or stream at the place of crossing and high and low water marks.

The name of the river or stream, and the mileage of the bridge should be given.

Upon completion of work application must be made to the Board for leave to operate.

No. 12—Bridges, Tunnels, Trestles, &c., over 18 feet span.—Section 257.

(*a*) Must be built in accordance with standard specifications and plans, approved of by the Board.

(*b*) Or detail plans, profiles, drawings, and specifications, which may be blue, white or photographic prints, must be sent to the Secretary of the Board for approval, &c., as in No. 11.

Upon completion of the work application must be made to the Board for leave to operate.

No. 13.—Station Grounds and Station Buildings.—Section 258.

Send to the Secretary of the Board:—

2 sets of plans showing the location, and details of structures, and yard tracks.

1st set for filing with the Board.

2nd set to be certified and returned to Company with certified copy of order of approval.

Note.—If approved plans, showing location, &c., of a station, are on file with the Board, and such station were burned, a letter from the company that it intended to erect another station of the same plan and location, would call from the Board an approval and waiver of filing new plans, unless the local conditions had so changed since the original station was erected, that public convenience called for enlarged facilities or change of location.

General Notes.

Plans (for Nos. 2 to 6) must show the right of way, with lengths of sections in miles, the names of the terminal points, the station grounds, the property lines, owners' names, the areas and length and width of land proposed to be taken, in figures (every change of width being given) the curves and bearings, also all open drains, watercourses, highways, and railways proposed to be crossed or affected.

Should the company at any time require right of way more than 100 feet in breadth for the accommodation of slopes and side ditches, it will be necessary to place on the plan cross-sections of the right of way, taken one hundred feet apart and extending to the limits of the right of way proposed to be taken.

Profiles shall show the grades, curves, highway and railway crossings, open drains and watercourses, and may be endorsed on the plan itself.

Books of reference shall describe the portion of land proposed to be taken in each lot to be traversed, giving numbers of the lots, and the area, length and width of the portion thereof proposed to be taken, and names of owners and occupiers so far as they can be ascertained.

All plans, profiles and books of reference must be dated and must be certified and signed by the President or Vice-President or General Manager, and also by the Engineer of the company.

The plan and profile to be retained by the Board must be on tracing *linen,* the copies to be returned may be either white, blue, or photographic prints.

All profiles shall be based, where possible, upon sea level datum.

All books of reference must be made on good thick paper and in the form of a book with suitable paper cover. The size of such books when closed shall be as near as possible to 7½ inches by 7 inches, or book of reference may be endorsed on the plan.

FORM OF BOOK OF REFERENCE REQUIRED.

..... Railway Company.

.....Division or Province.....Branch.

Book of Reference to Accompany Location Plan Showing Lands Required for Railway Purposes.

Station to	Station.	Width of Railway	Owner.		Centre of Book when open.	Part of	Section or Lot.	Township Parish Block or Number of Claim.	Range	Contents Acres.	Remarks.

INTERLOCKING SYSTEM.

Rules governing the use of Interlocking and Derailing Signals and speed of trains where one railway crosses another at rail level, or where a railway crosses a drawbridge.

1. The normal position of all signals must indicate danger.

2. When the distant semaphore indicates caution, the train passing must be under full control and prepared to come to a full stop before reaching the home signal.

3. When the home signal indicates danger, it must not be passed.

4. When clear signals are shown where one railway crosses another at rail level, the speed of passenger trains must be reduced to thirty-five miles an hour and freight trains to twenty miles an hour, until the entire train has passed the crossing.

5. When clear signals are shown where a railway crosses a drawbridge, the speed of passenger trains must be reduced to twenty-five miles an hour and the speed of freight trains to fifteen miles an hour, until the entire train has passed the drawbridge.

SESSIONAL PAPER No. 20c

General Requirements Applicable to Steam Railways for Interlocking, Derailing and Signal System at Crossings at Rail Level, at Junctions and at Drawbridges.

The plan and construction of interlocking, signalling and derailing system to be used at rail level crossings, junctions and drawbridges, shall conform to the following rules:—

1. Derails shall be placed not less than five hundred (500′) feet from the crossing point, junction point or from the ends of the drawbrige unless otherwise ordered. On single track railways derail points, when practicable, should be on inside of curve, and on double track railways the derail points should be in outside rail on both tracks. On the latter back-up derails will be required.

2. Home signals shall be placed fifty-five (55′) feet in advance of derail point, and the distance between home and distant signals shall not be less than twelve hundred (1,200′) feet, unless otherwise ordered. Signal post shall be placed over or on the engineman's side of the track, unless otherwise ordered.

3. Guard rails shall be laid on outside of rail in which the derail is placed, or on the inside of the opposite rail, and, commencing at least six (6′) feet in advance of derail point, shall extend thence towards the crossing, parallel with and nine (9″) inches distant in the clear from the track rail, for four hundred (400′) feet, fully spiked. In no instance, however, should the guard rail approach within one hundred (100′) feet of the diamond, junction point or end of drawbridge.

4. The normal position of all signals must indicate danger, derail points open unless otherwise ordered, and the interlocking so arranged that it will be impossible for the signalman to give conflicting signals.

5. Signals shall be of the semaphore type, the indications given by not more than three positions, and in addition at night by lights of prescribed colours.

6. The apparatus shall be so constructed that the failure of any part directly controlling a signal will cause it to give its least favourable indication.

7. Sempahore arms that govern shall be displayed to the right of the signal post, as seen from an approaching train.

8. Where switch and lock movements are used on facing point switches or derails on high speed routes they must be placed outside the rails and bolt locked with the signals governing them; when this is not practicable, facing point locks must be used.

9. The established order of interlocking shall be such that a clear signal cannot be displayed until derails or diverging switches, if any, in conflicting routes, are in their normal position, and the switches for the required route are set and locked.

10. High speed routes shall be indicated by high signals not more than three blades to be displayed on one signal post. Dwarf signals shall be used for low speed routes and for double track back-up derails.

11. The blades and back lights of all signals should be visible to the signalman in the tower. If from any cause, the blade or light of any signal cannot be placed so as to be seen by the signalman a repeater or indicator should be provided.

12. Application for inspection of interlocking plant must be made to the Board, accompanied by a plain diagram, showing location of the crossing, junction or drawbridge, and the position of all main tracks, sidings, switches, turnouts, &c., within the limits of the interlocker.

The several tracks must be indicated by letters or figures, and reference made to each, explaining the manner of its use. The rate of grade on each main track must be shown, together with the number of signals, derails, locks, &c., corresponding to levers in the tower.

Details.

13. The machine shall be of the latch locking type, and levers shall be numbered from left to right.

14. One lever shall operate not more than one signal.

Pipe Line.

15. One inch pipe of soft steel or wrought iron shall be used for connections to switches, derails, movable wing and point frogs, detector bars, locks, bridge couplers and home signals.

(*a*) Pipe lines shall be straight where possible, and shall not be placed less than four feet (4′) from gauge line, except where the lines run between tracks. On draw spans and approaches, they shall be kept as far from the gauge line as conditions will permit.

(*b*) Pipe lines shall be supported on pipe carriers, spaced not more than seven (7′) feet apart.

(c) Couplings in pipe lines shall be located not less than twelve (12) inches from pipe carriers with lever on centre.

(*d*) Pipe connections shall be made with threaded sleves, and the joints plugged and riveted; or keyed or by other approved method.

Wire Line.

16. Wire connected signals shall be operated by wires, the back wire to have two (2″) inches more stroke than the front wire.

(*a*) Wire lines shall be carried in wire carriers placed not more than forty (40′) feet apart. Where wire lines run next to the pipe lines, the wire carriers shall be attached to the pipe carrier foundations if convenient. Where wire carriers are attached to independent foundations, they shall be placed not less than six (6′) feet from gauge of nearest rail, where practicable.

By order of the Board,

A. D. CARTWRIGHT,

Secretary.

APPENDIX I.

CATALOGUE OF BOOKS IN LIBRARY OF THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

American Electrical Cases, 7 vols.
American Railway Reports, vols. 1 to 21 (vol. 1, Trueman; vols. 2, 3, 4 and 5, Mallory; 6, 7, 8 and 9, Shipman; 10 to 21, Ladd; Ladd includes 20 and 21 Clemens.)
America R.R. & Corporation Reports, Lewis, 12 vols.
American and English R.R. Cases, old series, 61 vols.; Digest, vols. 1-35, 36-43 (2 vols.)
American and English R.R. Cases, new series, 52 vols.; Digest, vols. 1-23, 24-43 (2 vols.)
American Street Railway Decisions, Richardson & Hook, 2 vols.
Annual Report R.R. Commission of Georgia, 1905, 1906 and 1907.
Annual Report of the R.R. & W. Commission of Illinois, 1905, 1906.
Annual Report of the R.R. Commission of Louisiana, 1905.
Annual Report of the R.R. Commissioners of Mass., 1905, 1908.
Annual Report of the Commissioner of Railroads of Michigan, 1904, 1906.
Annual Report of the R.R. & W. Commission of Minnesota, 1891-97, 1899-1907.
Annual Report of the Chief of Engineers of the United States Army, 1894, 6 vols.
Annual Report of the Interstate Commerce Commission, 1887-1907.
American and English Encyclopedia of Law, 32 vols.
American and English Encyclopedia of Law, supplement, vols. 3, 4.
Annual Supplements, 1898-1908, incl.
Armstrong's Digest N.S. Reports, 1 vol.
Anderson's Dictionary of Law.
Abbott's Railway Law of Canada, 2 vols.
Abbott on Telephony, 6 vols.
Abbott on Electrical Transmission of Energy.
Allen's Telegraph Cases.
Adams on the Block System.
Anderson—Index Digest of Interstate Commerce Law.
Ashe—Electric Railways.
Audette—Practice of the Exchequer Court.
Acts of the Provinces and of Canada Not Repealed by the Revised Statutes, 1887.
Actes du Canada et des Provinces non abrogés par les Statuts Revisés, 1887.
Acts of Assembly, 1878-1882, 1 vol.
Acts of Assembly, 1883-1886, 1 vol.
British Columbia Reports, 13 vols.
Beavan & Walford Railway Cases.
Beaudry-Lacantinerie, Droit Civil.
Beullac—Code de Procedure Civile.
Bird's Digest, B.C. Case Law, 1 vol.
Bouvier's Law Dictionary, 2 vols.
Beach's Law of Railways, 2 vols.
Baldwin—American Railroad Law.
Beach's Railway Digest, Annual, 1889.
Beach—Monopolies and Industrial Trusts.

Beal on Bailments.
Beal—Cardinal Rules of Legal Interpretation.
Beal & Wyman—Railroad Rate Regulation.
Beauchamp—Jurisprudence of the Privy Council.
Bell & Dunn's Practice Forms.
Bigg—General Railway Acts, 15th Ed., 1898.
Biggar—Municipal Manual, 11th Ed., 1900.
Blakemore—The Abolition of Grade Crossings in Massachusetts.
Bligh & Todd—Dominion Law Index, 2nd Ed., 1898.
Booth—Street Railways.
Boulton—The Law and Practice of a Case Stated.
Boyle & Waghorn—The Law relating to Railway and Canal Traffic, 3 vols.
Boyle & Waghorn—The Law and Practice of Compensation.
Brice—Ultra Vires, 3rd Ed., 1893.
Brice—Tramways and Light Railways, 2nd Ed., 1902.
Broom's Legal Maxims, 7th Ed., 1900.
Browne—The Law of Compensation, 2nd Ed., 1902.
Browne—Law of Carriers.
Browne's Practice before the Railway Commissioners.
Browne & Theobald—Law of Railways, 3rd Ed., 1899.
Bligh's Ontario Law Index to 1900.
Butterworth—Railway and Canals, 2nd Ed., 1889.
Butterworth—Practice of the Railway and Canal Commission.
Car Builders' Dictionary, 1906.
Century Dictionary and Cyclopedia, 10 vols.
Canadian Railway Cases, vols. 1-7
Canadian Railway Act (Annotated) MacMurchy & Dennison.
Cartwright on British North America Cases, 5 vols.
Code Civil de la Province de Quebec, M. Mathieu.
Code de Procedure Civile, Montreal, C. Theoret.
Cyclopedia of Law and Procedure, vols. 1-29, 1907; Annotations, 1 vol.
Coutlee's Digest Supreme Court Reports.
Canadian Annual Digest, 1896-1907.
Congdon's Digest, N.S. Reports, 1 vol.
Canada Law Journal, vols. 41, 42, 43.
Canadian Law Review, vols. 3, 4, 5, 6.
Cartwright's Canadian Law List, 1906-1908.
Carmichael's Law of the Telegraph, Telephone and Submarine Cable.
Chambers—Parliamentary Guide, 1909.
Chitty's K.B. Forms, 13th Ed., 1902.
Canadian Annual Review, 1906, 1907.
Chitty's Archbold's Q.B. Practice, vols. 1 and 2, 14th Ed., 1885.
Clarke—Street Railway Accident Law, 2nd Ed., 1904.
Clements—Canadian Constitution, 2nd Ed., 1904.
Clode—Rating of Railways.
Cooley—Taxation, vols. 1 and 2, 3rd Ed., 1903.
Connors—Report of the Working of American Railways.
Copnall—A Practical Guide to the Administration of Highway Law.
Cowles—A General Freight and Passenger Post, 4th Ed., 1905.
Croswell—The Law Relating to Electricity.
Currier—Railway Legislation of the Dominion of Canada, 1867-1905.
Consolidated Statutes of New Brunswick, 1903, vols. 1 and 2.
Consolidated Ordinances, N.W.T., 1898.
Complement des Statuts de Quebec, 1888.

Consolidated Ordinances of the Yukon Territory, 1902.
Daviel, Des Cours d'Eau, 3 vols.
Digest American Reports, 2 vols.
Digest U.S. Supreme Court Reports, vols. 1-206, 6 vols.
Digest U.S. Supreme Court Reports, vols. 1-186, 4 vols.
Digest Canadian Case Law, 1 vol. 1901-1905, incl.
Dale & Lehmann's English Overruled Cases, vols. 1 and 2.
Daniell—Chancery Forms, 5th ed., 1901.
Darlington—Railway Rates.
Darlington—Railway and Canal Traffic Acts.
Denton—Municipal Negligence (Highways.)
Disney—Carriage by Railway.
Dictionary of Altitudes in Canada, 1903.
Dodd—Law of Light Railways.
Dorsey—English and American Railroads compared.
Duff on Merchants Bank and Railroad Bookkeeping, 20th Ed., 1888.
Encyclopedia Britannica, 35 vols.
English Reports (reprints), 91 vols.
English Law Reports (complete set to 1908).
Exchequer Court Reports, 10 vols.
English Railway and Canal Cases, Nichol, 6 vols.
English Railway and Canal Traffic Cases, Brown, Macnamara and Neville, 12 vols.
English Ruling Cases, 26 vols and sup. vol. 27.
Encyclopedia of the Laws of England, 2nd Ed., 12 vols.
E. C. Clifton and A. Grunaux— A new Dictionary of the French and English Languages.
Ewart's Digest Manitoba Law Reports, 1 vol.
Elliott on Railroads, vols. 1, 2, 3 and 4.
Elliott on Roads and Streets, 2nd Ed., 1900.
Endlich on Statutes.
Eddy on Combinations, vols. 1 and 2.
Fuzier-Herman, Code Civil, 4 vols. sup, 2 vols.
Fuzier-Herman, Repertoire due Droit Francais, 37 vols. (Vols, 13 to 37 include Carpentier-Saint).
Farnham's Water and Water Rights, vols, 1, 2 and 3.
Fetter—Carriers of Passengers, vols. 1 and 2.
Fry—Specific Performance, 3rd Ed., 1892.
Gilbert—American Electrical Cases, 1903-4, vol. 8.
Gillette, Halbert P.—Handbook of Cost Data.
Glen on Highways, 2nd Ed., 1897.
Goodeve—Railway Passengers, 2nd Ed., 1885.
Gould on Waters, 3rd Ed., 1900.
Gray—Communication by Telegraph.
Greene—Highways, 2nd Ed., 1902.
Grierson—Railway Rates English and Foreign.
Grunaux, A. and Clifton, E.C.—A new Dictionary of the French and English Languages.
Hadley—Railway Transportation, 16th impression, 1903.
Haines—Railway Corporations as Public Servants.
Haines—Restrictive Railway Legislation.
Hamilton—Railway and other Accidents.
Hamilton—Railroad Laws of New York, 1906-7.
Hamlin—Interstate Commerce Acts Indexed and Digested.

Hardcastle's Statute Law, 3rd Ed., 1901.
Hay, Jr., on the Law of Railway Accidents in Massachusetts.
Hendrick—Railway Control by Commissions.
Henderson—Ditches and Water Courses, 1895.
High on Injunctions, vols. 1 and 2, 4th Ed., 1905.
Hodges on Railways, by J. M. Lely, vols. 1 and 2, 7th Ed., 1888.
Hodgins—Dominion and Provincial Legislation, 2nd Ed., 1887-1895.
Holmested & Langton—Ontario Judicature Act, 3rd Ed., 1905.
Holmestead & Langton—Forms and Precedents.
Holt—Canadian Railway Law.
Hopkins—The Law of Personal Injury.
Hudson—Compensation, vols. 1 and 2.
Hutchinson on Carriers, 2nd Ed., Mecham, 1891.
Hutchinson's Carriers, vols. 1, 2 and 3, 3rd Ed., 1906.
Interstate Commerce Commission Reports, vols. 1-5.
Interstate Commerce Reports, vols. 1-9; 3 copies of 10; 3 of 11; 2 of 12; 13.
Index of Cases Reported in Law Reports, 1905-1908.
Imperial Statutes, 1876.
Index to Quebec Official Reports.
Joyce—Electric Law.
Judson—Interstate Commerce.
Kent's Index to Cases Judicially Noticed in the Law Reports.
Keasbey—Electric Ways, 2nd Ed., 1900.
Kerr—Injunctions, 4th Ed., 1903.
Kirkman—The Science of Railways, 12 vol.
Law Times Reports, 98 vols.
Lower Canada Reports, 17 vols.
Lower Canada Jurists, 1-34.
Legal News, 20 vols.
La Thémis, 5 vols.
La Revue de Jurisprudence, 13 vols.
Langelier, Cours de Droit Civil, vols. 1 to 4.
Larombiere, 5 vols.
Langelier, De La Preuve, vol. 1.
Laurent, Droit Civil, vols. 1-33; Sup. 8 vols.
Littré et Beaujeu—Dictionnaire de la Langue Francaise, avec un Supplément d'Histoire et de Géographie.
Lafleur—Conflict of Laws.
Lefroy's Legislative Power in Canada.
Leggett—Bills of Lading.
Lewis—Eminent Domain, vols. 1 and 2, 2nd Ed., 1900.
Lovell's Compendium, 1907-1908.
Lovell's Gazetteer of the Dominion of Canada.
Laws of P.E.I., 1873-1902.
Laws of P.E.I., 1907, 1 vol.
Murray's English Dictionary, 7 vols.
Manitoba Reports, Temp. Wood, 2 vols.
Manitoba Law Reports, 17 vols.
Montreal Law Reports, S.C., 7 vols. Q. B., 7 vols.; Digest by Saint Cyr.
Mignault, 3 sets, 7 vols.
Mews' Digest of English Case Law, 16 vols.
McDermott—Railways.
McPherson & Clarke—Law of Mines.
Macnamara—Law of Carriers.

Mann—Massachusetts Railroad and Railway Laws, 1908.
Maxwell on Statutes, 4th Ed., 1905.
Mayne on Damages, 7th Ed., 1903.
Mayer—British State Telegraphs.
Meyer—Municipal Ownership in Great Britain.
Meyer—Public Ownership and the Telephone in Great Britain.
Michigan Railroad Laws, 1905-07.
Moore on Carriers.
New Brunswick Reports, 38 vols.
New Brunswick Equity Reports, 3 vols.
Nova Scotia Reports, Young's Admiralty, 1 vol.
Nova Scotia Reports, 41 vols.
Nouveau Dictionnaire, Anglais-Francais et Francais-Anglais.
Nellis—Street Railroad Accident Law.
Nellis—Street Service Railroads.
Nelson—The Anatomy of Railroad Reports.
Newcombe—Railway Economics.
Nova Scotia Laws, 1865-1871, 1 vol.
Nova Scotia Laws, 1872-1877, 1 vol.
Nova Scotia Laws, 1878-1882, 5 vols.
Nova Scotia Statutes, 1883.
Nova Scotia Laws, 1884.
Nova Scotia, Revised Statutes of, fifth series, 1884..
Nova Scotia, Revised Statutes of, fourth series, 1 vol.
Nova Scotia Laws, 1885-1892, 6 vols.
Nova Scotia Statutes, 1893-1899, 7 vols.
Nova Scotia, Revised Statutes of, 1900, 2 vols.
Nova Scotia Judicature Act, 1900.
Nova Scotia Statutes, 1900-1907, 7 vols.
Ottawa Directory, 1908.
Ontario Railway Digest, 1 vol.
Ontario Digest Case Law, 4 vols., sup. 1 vol.
O'Brien's Conveyancer, 3rd Ed., 1906.
Oxley's Light Railways, vols. 1 and 2.
Official Postal Guide of Canada, 1904, 1906.
Ordinances, N.W.T., 1878-1898.
Ordinances, N.W.T, 1899-1905
Ordinances, General, N.W.T., 1905.
Ontario, Statutes of, 1867-1876.
Ontario, Revised Statutes of, 1877, 2 vols.
Ontario, Statutes of the Province of Canada and Dominion of Canada affecting, 1877.
Ontario, Statutes of, 1877-1887.
Ontario, Revised Statutes of, 1887, 2 vols.
Ontario, Statutes of, 1888-1897.
Ontario, Revised Statutes of, 1887, 3 vols.
Ontario, Statutes of, 1898-1908.
Ontario and Upper Canada Reports, complete set up to Ontario Law Reports, vol. 16.
Ordinances of the Yukon Territory, 1906.
Prince Edward Island Reports, 2 vols.
Prince Edward Island, Statutes of, 1867-1872.
Prince Edward Island, Statutes of, 1903-1906, 4 vols.
Paine—The Law of Bailments.

Parsons—Railway Companies and Passengers.
Parsons—The Heart of the Railroad Problem.
Prentice—Federal Powers over Carriers and Corporations.
Patterson—Railway Accident Law.
Piggott's Imperial Statutes, vols. 1 and 2 to 1903.
Pollock—Bill of Lading Exceptions, 2nd Ed., 1895.
Poor—Manual of Railroads, 1905-1908.
Pratt—Railways and their Rates.
Pratt and MacKenzie—Highways, 15th Ed., 1905.
Quebec, Statuts de, 1866-1888.
Quebec, Statuts refondue de la Province de, 1888, 2 vols.
Quebec, Statuts de, 1889-1904.
Quebec, Statuts de, 1906-1908.
Quebec, Statutes of, 1868-1887, vols. 1 to 21, incl.
Quebec, Revised Statutes of the Province of, 1888, vols. 1 and 2.
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DEPARTMENT OF RAILWAYS AND CANALS

REPORT

OF THE

HUDSON'S BAY RAILWAY SURVEYS

PRINTED BY ORDER OF PARLIAMENT

OTTAWA
PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1909

[No. 20*d*—1910]

REPORT

ON THE

HUDSON BAY RAILWAY PROJECT

October 30, 1909.

Hon. George P. Graham,
Minister of Railways and Canals,
Ottawa, Ont.

Sir,—I have the honour to report upon the Hudson Bay Railway project, as follows:—

Mr. John Armstrong, B.A., B.A.Sc., M. Can. Soc. C.E., was appointed Chief Engineer in the fall of 1908. He promptly organized four parties and carried on his work in a most satisfactory manner, and to him and his assistants credit is due for an efficient piece of work. Lines were run to Fort Churchill and Port Nelson from the Pas Mission, and contours were taken closely enough to enable a projected location to be made that reasonably assures accurate quantities; and detailed surveys were made of the harbour at Port Churchill and Port Nelson—and at important river crossings.

The basis of Mr. Armstrong's estimate is given in full detail. He has estimated for 60 pound rails; I have increased his estimate to provide for 80 pound rails and fastenings; and as he has not estimated for round houses, shops, buildings, elevators and yard facilities at terminals, or harbour works, I have accordingly estimated for these items.

I find considerable difficulty in deciding upon what basis to provide accommodation for a railway that, in the nature of things, cannot be operated to its capacity for more than two months in the year—to a lessened extent for a possible three months, and for the remainder of the year still less. I have, however, provided facilities on a scale that will admit of the maximum capacity for a single track: passing tracks and telegraph stations every five miles, water stations every fifteen miles, and round house and shop accommodation sufficient to care for thirty-two (32) freight trains and one (1) express train per day of twenty-four (24) hours.

Mr. Armstrong has discussed the merits of the harbours at Churchill and Nelson; and as he has furnished plans with soundings, I have plotted the piers and terminals required.

From the information, there is no room for doubt that Nelson is much the better harbour. The line is also shorter by 67 miles, the country through which it runs is better, and the possibility of local business altogether with the Nelson route. There is also a probability that a fair proportion of the route is available for settlement; whereas on the Churchill route, there is no such probability beyond Split lake, where the lines separate.

It is of the utmost importance that a hydrographic survey should be made of the Hudson strait and bay, so that the position and cost of the necessary lighthouses may be ascertained. This work properly belongs to the Marine Department, and is important enough to demand the personal attention of its most capable officer; and while in progress, complete observations should be taken by reliable men stationed at Cape Chidley and Resolution island, at the mouth of Hudson strait, at Salisbury island near the junction of the Fox channel, and at Mansfield island, as well as at the mouth of the Nelson itself. The course from Mansfield island to Nelson requires to be accurately chartered, and the exact positions of the lighthouses necessary at the mouth of the channel should be fixed. It would be well to also secure information as to the harbours on the Labrador coast, and the special feature of Davis strait. A good sea-going boat is required at Nelson for a year or two, to study the bay itself, its tides, currents, &c. Particular study should be made of the mouth of Ungava bay; and also, as to all harbours of refuge along the route and the best way to approach them, where safe anchorage may be had, &c. A lighthouse will be required at the most southerly end of Greenland.

The route will pass to the north of Ireland, and the distance from Liverpool to Port Nelson, as measured on a mercator projection map, is 3,200 miles—against 3,007 from Montreal to Liverpool.

The crux of the matter is—what business can be handled by such a railway, and of what value it is likely to be to the country tributary to it? The general map of the Northwest, which accompanies the report, shows, by concentric circles, the areas tributary to Pas Mission (the starting point of our line) and Winnipeg. For all practical purposes the city of Winnipeg is as close to Fort William as the Pas is to Hudson bay at Port Nelson, hence they may be compared as radiating points.

A line drawn from Dauphin, Man., in a southwesterly direction passing through Weyburn, Sas., separates the tributary territory. Practically the whole of the province of Manitoba, and about 11,000 square miles of the southeasterly corner of Saskatchewan, is tributary to Winnipeg; the whole of the remaining area of Saskatchewan and Alberta belonging to the Pas. This immense district is equal in area to the states of North and South Dakota, Minnesota, Wisconsin, Nebraska and Iowa, where there is a population of about 10,000,000, and a railway mileage of about 50,000. I think that, square mile to square mile, the fertility of the northwest is at least equal to the states named.

Assuming that the line is to be worked for all that is possible to be done. The grades are 0·4 or 21 feet to the mile. All trains are fully loaded and composed of 40 ton pay load cars; and locomotives of the Mallet articulated compound type are to be used with a hauling power of at least 4,000 tons of pay load. Thirty-two (32) trains

per day is about the capacity of a single track—better than this has been done, but it is enough.

Sixteen (16) trains loaded=64,000 tons per day—making allowance for accidents and delays—say for 30 working days we get 1,930,000 tons, or 64,000,000 bushels of wheat.

I assume that ships can be secured wherever there is sufficient business offered. It is apparent that at least nine per day would need to be loaded, or say 135 to 140, to do the business—allowing 2 trips to each ship. Any additional business taken to the bay would have to be stored until the following August—nine months.

Other sources of traffic possible to the line are: the exportation of cattle; the usual package freight to and from Europe; and the possibility of developing a reasonably large import coal trade. I believe it is practicable to lay down coal at Port Nelson from Nova Scotia at a cost not exceeding $3.75 per ton. The rail haul say to Saskatoon—as an average point of distribution—need not exceed $4 per ton, making the cost of the coal $7.75. At present, I believe, it costs quite $9 in the same territory.

Equipment for thirty-two (32) trains per day of the character outlined will cost about $9,000,000; and means the providing of 108 train crews, 150 telegraph operators, 54 gangs of section men, shopmen, round house men, superintendents, train and yard masters—the greater number of whom are not likely to be required once the rush of the season is over. It appears, therefore, to be a difficult proposition for independent operation, and would seem to require to be worked by one of the large corporations, so that the men and rolling stock could be utilized the whole year. There is in Canada only one locomotive of the type described, and by using the largest freight engines now operated on western roads the train load would be reduced one-half—and the capacity of the road in like measure.

It is apparent, however, that under any circumstances grain may be placed at the Hudson bay on board ship as cheaply as at Fort William, hence the saving possible is 5 cents per bushel, assuming that insurance and freight rates are equal at Montreal and Port Nelson. Captain Bernier is of the opinion that it is unsafe to be caught in the vicinity of the Fox channel with a steamship of ordinary construction, any later than October 15th.

Mr. Armstrong's report will be found attached hereto.

I have the honour to be, Sir,
Yours faithfully,

M. J. BUTLER,
Deputy Minister and Chief Engineer.
October 21, 1909.

Mr. M. J. Butler,
Deputy Minister and Chief Engineer,
Department of Railways and Canals,
Ottawa.

Dear Sir,—I herewith beg to submit a general report on the results of the preliminary surveys in connection with the proposed railway to Hudson bay, and undertaken in accordance with your letter of instructions dated July 10, 1908.

ORGANIZATION.

Four parties were organized and started to work at various points between The Pas and Port Churchill, dividing the territory to be covered into sections of approximately 120 miles each. Another small party, No. 5, was organized for the purpose of exploratory work whereby much general information was obtained, and the running of much unnecessary lines by the regular parties avoided.

During the progress of the work more information about the Nelson river was obtained, and seemed to justify an examination of that route, as well as the route to Churchill. On the completion of their exploratory work Party No. 5, was re-organized and allotted to this work, and to a preliminary survey of the harbour at the mouth of the Nelson river. In order that no hitch might occur in the transportation and supply arrangements, Mr. E. H. Drury was established at Split lake as divisional engineer, supervising the work of parties 3, 4 and 5.

Parties 1 and 2 were despatched from Winnipeg on August 30, to the Pas, going by rail to Prince Albert and thence by Hudson Bay Company's steamers down the Saskatchewan river to their destination. Party No. 1 commenced work on September 14, about 40 miles north of The Pas. Party No. 2, owing to the long and difficult route adopted, did not arrive on their work until November 7, the last of the five parties to commence work. Since then we have discovered a much easier and quicker route to the work, and could do the same work now in less than half the time and for half the expense.

Parties 3, 4 and 5 left Winnipeg on September 19, going by way of Lake Winnipeg and the Nelson river to their destination. Party No. 5 commenced work on October 5, No. 3 on October 24, and No. 4 on October 29.

Parties 1 and 2 completed their work and were disbanded on March 11 and 24, respectively. Party No. 3 and the Split Lake Division office was disbanded on April 6.

Parties No. 4 and 5 completed their work on the railway lines about April 1, and were thereafter engaged on the harbour surveys, No. 5 completing their work and disbanding on July 6, and No. 4 on August 13.

The health of the parties throughout the work was uniformly good; not a single serious accident or case of sickness being recorded on all the work.

COST.

The total cost of the work, including all returns to date of September 30, with outstanding accounts yet to be settled, totals $130,716.09. A few of the outstanding

accounts are in process of adjustment, but the final result will not differ materially from this total.

Since commencing location, supplies and equipment to the extent of $5,952.34 have been taken over for location work, leaving $124,763.75 to charge against preliminary work, and distributed as follows. Survey of railway routes $101,123.75. Surveys of harbours $23,640. This cost is largely due to the extra expense of transportation through such a country, a considerable portion being due to the fact that the work on the Nelson route was not taken up until well on in February, thus obliging us to pay winter rates for the transport of provisions along this route. The experience of the Canadian Northern and Grand Trunk Pacific seems to indicate that it usually costs from $300 to $500 per mile to secure a final location in such country as this. During the progress of our work much information has been gained relative to transportation routes, which will enable us to greatly reduce the cost of supplies in future, and although the preliminary work has seemed costly I do not expect that the cost of the final location will be greater than that usually obtained in such countries.

During the time when all parties were at work there was an average of about 110 on the pay-rolls.

METHODS USED.

The surveys were made in the usual way with transit level and chain. Contour topography was taken over the greater portion of the line, as well as all lakes, swamps and other points of interest in the vicinity of the line. In order to illustrate more fully the class of information obtained by the engineers in the field a plan and profile of a representative portion of the line are being forwarded to you. This will probably show more clearly than any description could do, the character of the information upon which the estimate of the cost of construction has been based. This plan is exactly as turned in by the engineer in the field.

In making up the estimate different methods of dealing with stream crossings were frequently adopted, this plan only being intended to illustrate the information obtained.

NATURAL RESOURCES.

The timber along the proposed route to Churchill has been described in the preliminary report of February 15, 1909. The work on the Nelson route since then has, however, developed the probability that the timber which may be available by the opening of that route is of much greater value than usually supposed. The whole country is full of lakes and streams, and different parties passing through by different routes have found most of the lakes and streams bordered by areas of timber of commercial value. These areas vary in size from a few acres to some as large as forty or fifty square miles, and in the aggregate totaling several thousand square miles. We have no means of making an approximate estimate of the quantities, as large areas though tributary to the railway route lie far to one side or other of any probable location of the line, and consequently were not visited by the engineers. However, the information obtained is of such a nature as to warrant the recommendation that a thorough examination be made of the timber resources of this territory by competent timber cruisers.

AGRICULTURAL LANDS AND MINERALS.

No further information can be added to that already given in the report of February 15. It will be remembered that the greater portion of this work was completed during the winter months, when the ground was frozen and covered with snow, rendering it impossible to obtain much information on these subjects.

It may be remarked here, however, that although these lands may require more or less improvement in the way of clearing and drainage, the fact that they are situated within a few hours' run of an ocean port may give to these lands a value not hitherto thought of, and may cause a more rapid settlement than expected. At the inland Hudson bay posts all kinds of grain and vegetables have been grown successfully for years. A study of the records of the Meteorological Office indicates that the climate is quite as favourable for farming operations as that of Prince Albert. Our own records extending only from November to March simply corroborate the general impression that it is very cold during the winter months, but furnish no information as to the conditions during the summer, or growing season.

Our definite knowledge of minerals is limited to limestone and marble. The limestone occurs in the southern portion of the line a short distance from The Pas, in unlimited quantities favourable for quarrying, and will probably prove the future source of supply for the greater part of the province of Saskatchewan and Manitoba.

Marble of a very high grade occurs on Marble island in Hudson bay, and is also found of a fair quality at Port Churchill.

Iron ores, gold, silver, galena, mica and other minerals have been discovered by the Geological Survey at various localities on the bay, all of which are fully described in the reports of that department.

Various specimens of the precious metals have been shown to our engineers, but their origin was preserved in so much mystery that they could not be treated as evidence of the existence of the metal in that territory and might have been used with equal effect to demonstrate the richness of a deposit in Colorado or Johannesburg.

FISH.

All the evidence obtainable points to the existence of various varieties of fish of good quality in Hudson bay in large quantities. This should be of great value to the west, as fresh fish can be laid down in twenty-four hours at all the main centres in Manitoba and Saskatchewan. This will largely be an express traffic, and according to recent investigations of the Railway Commission this seems to be a remunerative business, and should prove a source of great profit to the Hudson Bay Railway.

STREAMS AND WATERWAYS.

The principal waterways of the country traversed by the surveys were described in the report of February 15. Since then a general map has been prepared showing, in addition to the streams described, the extension of these waterways throughout the west, together with the railway system as it exists at present. The map shows the principal waterways which are susceptable of development for purposes of navigation, and shows the extent to which they may become feeders of the Hudson Bay Railway. These waterways have all been recently navigated by vessels of considerable size. During the summer of 1908 the steamer *Alberta* made the trip from Edmonton to Winnipeg where she is now engaged in the excursion business. During the past summer a good sized steamer made a return trip on the South Saskatchewan between Medicine Hat and Saskatoon, and in the month of June a number of business men from Grand Forks, North Dakota, made a successful excursion trip from Grand Forks to Winnipeg and return via the Red river.

An approximate estimate of the discharge of the Nelson river gave results as follows:—No. 1, 156,869 cu. ft. per second; No. 2, 149,693 cu. ft per second.

In the first measurement the velocity was obtained by means of floats, and in the second by means of a current meter borrowed from the Department of Public Works.

Below this, several large streams enter, and many small ones, so that the discharge at Port Nelson is probably not far from 200,000 cu. ft. per second. The discharge of the Churchill river has been roughly estimated as 40,000 cu. ft. per second at low water.

On the general map is also shown a proposed extension of the railway line southerly to connect with the existing railways.

One projection is shown along the Carrot river from The Pas to Saskatoon. At Saskatoon connection is made with lines leading to most of the principal centres of trade in the provinces of Saskatchewan and Alberta.

This line will also open up a very fertile country along the Carrot river and give an outlet for valuable timber areas along the northern slope of the Pasquia Hills. This line will be through open prairie country and a first-class road can be built for $20,000 per mile.

Another suggested extension is from the southern terminus of the Canadian Northern Railway's Pas branch to Yorkton, giving communication with Regina and other centres in eastern Saskatchewan and western Manitoba. This line will also be prairie work and should not exceed $20,000 per mile for a good road.

THE CHURCHILL ROUTE.

The first section of approximately 120 miles is through a comparatively level or smooth country, affording easy grades and cheap construction. The territory is underlaid with limestone in horizontal or flat beds, rarely rising above the general level to any extent, and when it does so it is in such a way as to be easily avoided by the railway line. Owing to this condition the rock cutting on this section will be practically nil.

The balance of the grading on this section will largely be in clay loam material, probably 70 per cent, the remainder being of sand, gravel and swamp or muskeg. It may be remarked here that what is called muskeg in this country is not a true muskeg, but would be more properly defined as swamp. Good bottom is usually obtained at a depth of three or four feet, and very seldom exceeds 7 or 8 feet.

The stream crossings will be light, with the exception of the Saskatchewan river crossing. Frog river, the connection between Moose lake and Cormorant lake, is a navigable stream for small boats, and as we cross it very low down it will probably be necessary to provide a swing span of some kind. As a fifty or sixty foot opening will do, the sum required will not be large.

Since taking up the location work it has been found possible to practically eliminate the hump shown at mile 25 on the condensed profile, and with good prospects of materially improving the hump at mile 55.

The second section of 120 miles is through granite country, and although the same general characteristics are preserved the granite ridges are more abrupt, and will force us to take some rock cuttings, although fortunately most of them will be small. All the streams and lakes throughout these two sections possess more or less valuable timber of which the accompanying photograph is an illustration.

From the 240th mile to the 360th mile we have the roughest country encountered, and considerable exploratory and extra preliminary work has failed to find any better route than that adopted. In this territory is included the rise between the basin of the Nelson river and that of the Churchill. The actual height of the summit between the two rivers is not very great, but both approaching and leaving this summit a heavily rolling or undulating country is encountered, and requires the development of a considerable length of line, and the introduction of much curvature to secure the grades adopted, at a reasonable cost. On the Nelson river side of this ridge a considerable amount of heavy work will be necessary, but on the Churchill slope although the yardage to be moved will be heavy it is not anticipated that much rock will be encountered.

The fourth section, extending from the 36th mile to Port Churchill will require the moving of only a light yardage, but the northern 70 miles being over the tundra, or barren lands, may prove to be a more expensive piece of work than the profile would indicate. Mr. W. J. Clifford made a trip through this section in the month of June for the purpose of examining it after the snow had disappeared. He does not anticipate any serious difficulty or danger in constructing this section, the chief drawback being from the fact that although the material is such as would usually be classified as common excavation, so much frost will be encountered that probably a considerably greater price will have to be paid for its handling than for common excavation.

The timber over sections 3 and 4 is not of very much value. A few ties and some timber for temporary work may be obtained but only in small quantities.

The bridging on the whole will average light, the only two bridges of great importance being the Saskatchewan crossing and the Deer river crossing about mile 350.

As intimated in the notes on the estimates, a considerable number of small pile structures have been designed for the purpose of furnishing ample waterway until a sufficient observation of the stream will better enable us to specify a suitable permanent structure.

The curvature as estimated from the projected location averages 9° 55′ per mile.

The grades adopted, viz.: ·4 northbound and ·6 southbound, have been obtained without great effort and although some development was required on section 3, the ease with which they were obtained on the remaining sections seems to justify their use all through for the sake of uniform grades on all engine divisions.

THE NELSON ROUTE.

The route selected towards Port Nelson follows the Churchill route for some 150 miles or thereabouts, the description of which has been given. Unlike the Churchill route, the Nelson route does not resolve itself into natural divisions each presenting different characteristics peculiar to itself, but throughout maintains a generally uniform appearance so that the description given for the first division of the Churchill route may be applied in a general way to the whole of the Nelson route. It is not expected that the rock work will amount to very much, the major portion of the grading being in clay loam with smaller percentages of sand, gravel and swamp. The tundra is not encountered on this route, the whole line being through timber not appreciably different from that described on the first 200 miles of the Churchill route. It may be mentioned here that sand and gravel has been found sufficiently often to justify our belief that ballast may be had without unduly long hauls, except on the northern 70 or 80 miles of the Churchill route. It may be found there, but as yet we have not noted it. The curvature has been estimated to average about 5° 30′ per mile over this route.

A grade of ·4 both ways may be had on this route.

The adoption of ·6 against southbound traffic would not help alignment nor save grading.

There are three important bridges on the Nelson route, viz.: the Saskatchewan, the crossing of the Nelson at Manitou rapids, and the second or lower crossing of the Nelson. The Manitou crossing of the Nelson is a particularly favourable crossing, the river here being confined in one channel of less than 350 feet in width, the banks being of merely perpendicular granite rock and so situated as to make it possible to choose almost any desired elevation between fifty and one hundred feet above the water. Water here is of course very deep, and has a current of from six to eight miles per hour, making it necessary to cross with either a single span or an arch. The lower crossing will be much longer, probably 3,000 feet, from grade to grade, with a waterway of 1,500 feet with the grade line approximately 80 feet above the water. The balance of the bridging will be light, trestles being sufficient in all cases with the exception of Frog river.

HARBOUR WORK.

The plans and reports of the terminal work having already been sent you, it will only be necessary to treat briefly of the object with which this work was undertaken.

It has been endeavoured to treat the subject not as a problem by itself, relating only to the sheltering of ships, but to treat it as one feature only of the problem of the Hudson bay route as a whole. To this end it was necessary to consider and obtain all possible information relating to roadsteads, entrance channels, harborage, docks, facilities for providing railway terminals and other works necessary for the transhipment of goods, length of season open to navigation, ice conditions, and possible future inland communication by improvements to existing waterways, and to the feasibility of approach by the proposed railway. It was realized that the importance of the port and the Hudson bay route as a whole depended in no small degree on the efficiency of the rail communication inland.

In accordance with the above, surveys were made of the harbours at the mouths of both the Churchill and Nelson rivers, the results of which have been sent forward to you.

The results at Nelson seem to justify the recommendation that a further appropriation for an accurate survey of that port be made before it is rejected as a terminus for the Hudson Bay Railway.

(Sgd.) JOHN ARMSTRONG,
Chief Engineer, Hudson Bay Ry. Surveys.

THE ESTIMATE.

CLEARING.

The estimate is based on right of way 150 feet wide with the necessary allowances added for sidings and terminals. A few miles of heavy clearing will be encountered, but the average over the whole line will be comparatively light. The first 200 miles will be through spruce and jack pine with a small proportion of poplar and tamarack. The northern 100 miles of the Churchill route will have practically no clearing. The northern 200 miles of the Nelson route will be through spruce with a small proportion of jack pine and tamarack and will probably have from 12 to 15 acres per mile to clear. A large portion of the clearing on both routes could probably be done for $25 or $30 per acre, but owing to the heavier clearing encountered at intervals an average price of $40 per acre has been decided upon. This should be ample to cover whatever close cutting is required as well.

GRUBBING.

This item is somewhat difficult to estimate without an actual location profile. One and a half acres per mile has been used for 400 miles of both lines, using the price $100 per acre which seems to be the price bid by contractors almost universally. The work will class as light, a large proportion of it being such as can be done with heavy grading or breaking ploughs.

GRADING.

This being the chief item in the estimate, considerable care has been taken with it. The quantities submitted are taken from the projected profiles, and the greater portion of these being very close to the preliminary lines, should be as accurate as is possible without cross sections. Engineers in the field were instructed to take out these quantities liberally, and the estimates submitted by them are probably at least 10 per cent in excess of what the profile actually shows.

In addition to this, 25 per cent has been added to all quantities by this office, to cover drainage, settlement, &c., so that the quantities here reported are approximately 35 per cent in excess of what the profile actually shows. This should provide for all possible contingencies, especially as one of the main causes of swelling of estimates, viz.: road and farm crossings is not met with here. In addition, 1,100,000 cubic yards are added to Churchill route and 900,000 cubic yards added to Nelson route for sidings and terminals. At the present time not one single road or farm crossing exists between The Pas and Hudson bay. The prices adopted, $1.80 for solid rock, 65 cents for loose rock and 30 cents for earth, approximate closely to the prices obtained on the Transcontinental Railway in what may be termed similar country, viz.: districts C, D and E. The price 30 cents for earth is perhaps somewhat lower than Transcontinental Railway prices, but I am confident that the contractor who bids over 30 cents on this work will have no chance to get the contract. The portion from The Pas to Hudson Bay Junction of the Canadian Northern Railway, a much worse proposition than any we have encountered, was done at a profit, for 25 cents during the high wage period of 1906 and 1907.

These prices quoted are of course the average. In making up the estimate the prices used on the northern portion were, for solid rock $2, loose rock 75 cents and common excavation and borrow 50 cents. The summation of the quantities and cost

on the different sections resulted in the above quoted averages of prices which have been used in this estimate. On sections 1 and 2 the engineers did not esimate any loose rock. For this reasan the 25 per cent added to their common excavation has been classified as loose rock. The classification made has been based on the Transcontinental Railway specification. The accessibility of the work will not be so difficult as supposed. The first section has rail communication to The Pas with a fairly good steamboat connection already established to Moose lake, 50 miles along the route. The construction of wagon or sleigh roads from this point on will be easy. The second section, with communication from Winnipeg via Lake Winnipeg and the Nelson river, can be made quite adequate for the comparatively small sum of fifteen or twenty thousand dollars. In case the Churchill route is selected this will be more expensive. The third section may be supplied from Churchill or Nelson if so desired. In the case of Nelson good water connection being possible for 60 or 70 miles inland. In case the Churchhill route is selected probably steam shovels will be required on a section of about 35 miles near Split lake. These water routes suggested are not recommended for the transport of such plant as this, but will be useful for all lighter supplies and materials. On the Nelson route no steam shovel work is anticipated, except blasting—the plant for which will follow along behind the track.

TIMBER.

On the Churchill route a sufficient amount of timber for ties, piles, and temporary work may be had convenient to the line on the southern portion as far as the 240th mile, but beyond this point none can be had. For this reason piling has been quoted as 50 cents per foot on the Churchill route, as against 40 cents on the Nelson route, where timber may be had all the way to the bay. The quantities estimated for piling do not look very large, but it is to be remembered that all our stream crossings are very low, thus cutting down the length of the piles and also reducing the length of bridging or number of bents required. With the exception of the Saskatchewan river crossing and the crossing of the Deer river on the Churchill route all waterways have been estimated for, as temporary wooden structures.

On the Nelson route the Saskatchewan crossing and the two crossings of the Nelson are to be steel and concrete, all others wood. Our expedition is practically the first which has obtained definite and specific information of the country through which it is proposed to run, but inasmuch as practically all the work was done in the winter months with everything frozen solid and under three or four feet of snow it is perhaps too much to expect that a proper estimate of water openings could be made. For this reason temporary wooden structures of such a nature as will suffice for a period of from 7 to 10 years has been estimated for.

During this period close observation of the waterways will enable us to specify with more certainty the style and size of opening required. With this closer knowledge of what is required, and with the increased facilities for handling cement and other materials for permanent structures, the final cost will probably be less than if an attempt were made to construct them now.

Cedar timber for culverts may be had f.o.b. cars in Winnipeg for $18 and $20 per thousand, and with freight added is worth $22 to $25 at The Pas. The price of $40 thus leaving from $15 to $18 for framing and contingencies, and is probably high enough to cover the cost of what little excavation may be needed. If timber native to the country can be used, such as spruce and tamarack, a considerable saving may be effected. My own experience has been that such timber is quite good for seven years, and I know of some spruce culverts built twelve years ago and still good.

The timber for trusses and stringers being imported from British Columbia will be more expensive, but will be approximately the same for both lines.

IRON.

An average of 5 cents per pound has been adopted, based on Winnipeg prices, plus freight to The Pas.

TRACK MATERIAL.

Steel rails of 60 pounds per yard are proposed. Much of the material of which the roadbed will be composed is of a peaty nature and some settlement may be expected. Under such circumstances it is probable that a better track can be maintained with the 60 pound rail than with the 80 pound rail. Prices are based on Fort William prices plus freight to The Pas, wheelage charges, &c., and an allowance of about $3 per ton for contingenciese.

TIES.

Estimated at 3,000 per mile for all tracks. Being obtainable at all points on the Nelson route 40 cents each has been adopted, but none being obtainable beyond Split lake on the Churchill route, 50 cents has been used for that estimate.

SWITCHES.

In the estimate for switches is included split switch points, spring frogs, switch stands, lamps, and an allowance of $15 to cover the difference between common ties and switch ties at each switch.

TRACK LAYING.

The prices on the Transcontinental Railway vary from $400 per mile to $600 for laying the 80 pound rail there used, so that $500 per mile should be ample price for laying the lighter 60 pound rail proposed for this line.

BALLASTING.

Indications are that we will not find it necessary to exceed a maximum haul of 25 miles except in the northern 100 miles of the Churchill route, where a 50 mile haul may be encountered. However, as ballast may be found closer, $1,000 has been estimated for both routes and includes side tracks and terminals as well as main tracks.

WATER TANKS.

This question has been fully looked into, and it is found, from the Great Northern Railway experience, that $5,000 should build a tank of 50,000 gallons capacity, of the most approved pattern and as nearly frost proof as has yet been devised; including machinery and heating apparatus inside the tank. As water is very plentiful in our country the intake and piping will not be expensive.

In addition to the above items discussed there is left for you to estimate upon, station houses and terminal structures, shops, docks and elevators.

In the estimate a side track of 5,000 feet was assumed every eight miles, with a station house, water tank, and accommodation for two section crews at every alternate one. This leaves each section crew the somewhat lengthy section of 8 miles and also situated at one end of the section. It has, however, the advantage of always having the section crew where the superintendent or road-master can always communicate quickly by telegraph or telephone.

Passenger traffic, express traffic and small package freight for a number of years at any rate cannot be very large, so that the accommodation in the station

may be cut to a minimum. Out-going local freight will consist largely of timber which requires no shelter, and incoming local freight will be mostly for lumber camps, the most bulky articles of which, such as hay, oats, flour, pork, &c., if necessary can be better accommodated in a separate warehouse of much cheaper construction. Thus the accommodation of our stations will be principally limited to the requirements of the railway agent. A few years after the opening of the railway the principal centres of development will have become apparent, and more suitable station and freight sheds erected as required.

TERMINALS.

The Churchill route, 477 miles approximately, is too long for three engine divisions in this hard winter climate. The Nelson route, 410 miles, can probably be handled by three train divisions, as owing to the better grades the 135 mile Nelson division will not be a harder task for the engine than the 120 mile in Churchill division. On the Nelson route this will mean four sets of buildings, and on the Churchill route five sets.

CHURCHILL ROUTE.

	Unit.	Quantity.	Rate.	Amount.
			$ cts.	$ cts.
Clearing	Acre	7,000	40 00	280,000 00
Grubbing	Acre	600	100 00	60,000 00
Grading	C. yd.	9,740,000	0 50	4,870,000 00
Piling	L. ft.	180,000	0 50	91,000 00
Timber in culverts	B. M.	3,250,000	40 00	130,000 00
Timber in bridges and trestles	B. M.	4,000,000	55 00	220,000 00
Iron in bridges and culverts	Lb.	2,600,000	0 05	130,000 00
Steel rails	Ton	54,000	40 00	2,160,000 00
		18,000		*720,000 00*
Angle bars	Ton	2,680	50 00	134,000 00
		900		*45,000 00*
Bolts and nuts	Ton	454	80 00	36,320 00
Spikes	Ton	2,040	65 00	132,600 00
Ties	Each	1,700,000	0 50	850,000 00
Track-laying	Mile	567	500 00	283,500 00
Switches (complete)	Set	300	250 00	75,000 00
Water tanks	Each	30	5,000 00	150,000 00
Steel bridges, steel	Lb.	3,700,000	0 05	185,000 00
" concrete	C. yd.	6,000	15 00	90,000 00
Ballasting	Mile	567	1,000 00	567,000 00
Telegraph line	Mile	477	300 00	143,100 00
Total				10,586,520 00
Increase due to 89 lb. rail				*765,000 00*
				11,351,520 00
Station buildings, telegraph stations, section houses, round houses, locomotive and car repair shops, power plant, tools, warehouse at port, coal unloading plant			1,700,000 00	
Two 4,000,000 bush. cap. fire proof elevators			4,000,000 00	
Yard facility at terminals			320,000 00	
Engineering, law costs and contingencies, 10%			1,737,152 00	
			87,757,152 00	
Harbour work, piers, dredging, exclusive of lighthouse and buoying			86,675,000 00	
				$19,108,672 00

NELSON ROUTE.

		Rate.	Quantity.	Amount.
		$ cts.		$
Clearing	Acres.	40 00	7,000	280,000
Grubbing	"	100 00	600	60,000
Grading	Cu. ft.	0 40	7,500,000	3,000,000
Piling	L. ft.	0 40	200,000	80,000
Timber in culverts	M. ft., B. M.	40 00	2,800,000	112,000
Timber in bridges and trestles	" "	55 00	3,200,000	176,000
Iron in bridges and culverts	Lb.	0 05	2,100,000	105,000
Steel rails	Ton.	40 00	45,500	1,820,000
			15,000	*608,000*
Angle bars	"	50 00	2,280	114,000
			800	*40,000*
Bolts and nuts	"	80 00	390	31,200
Spikes	"	65 00	1,740	113,100
Ties	Each.	0 40	1,450,000	580,000
Switches	Set.	250 00	240	60,000
Track-laying	Mile.	500 00	483	241,500
Water tanks	Each.	5,000 00	25	125,000
Telegraph lines	Mile.	300 00	410	123,000
Bridges, steel	Lb.	0 05	9,400,000	650,000
" concrete	Cu. yds.	15 00	12,000	180,000
Ballasting	Mile.	1,000 00	483	483,000
Total				8,333,800
Increase due to 80 lb. rails				*648,000*
				8,981,800

Station buildings, telegraph cabins, section houses, round houses, repair shops, locomotive and car, tools, power plant, warehouse at port, coaling plant	$ 1,647,600	
Two 4,000,000 bush. fire proof elevators	4,000,000	
Yard facility at terminals	320,000	
Law costs and contingencies. Engineering, 10%	1,476,940	
	7,444,540	
Harbour work, piers and dredging, exclusive of lighthouse and buoying	$5,065,000	
		$16,426,340

PORT CHURCHILL.

THE CHART.

Two charts, or maps, are being furnished with this report. One on a scale of 4,000 feet to 1 inch for purposes of comparison with Port Nelson, and a large one on a scale of 1,000 feet to 1 inch, as a working map. On this larger map are shown also 10 feet contours and other notes in more detail than was possible on the smaller scale. The soundings are reduced to low water level.

GENERAL DESCRIPTION.

Port Churchill is at the mouth of the Churchill river where the river passes through a large tidal flat or lagoon mostly dry at low tide except near the outlet to the sea. The lagoon is surrounded by hills consisting of rock at the sea outlet and of sand and gravel further up the river. The only available situation for docks at present is out near Cape Merry, with the railway terminals from two to three miles up stream.

and the townsite from three to five miles up stream. Another townsite is available on the west side, but it would be somewhat difficult to get railway and dock sites.

There is no possibility of improving the Churchill river so as to give inland communication by water owing to its shallowness over its many wide and frequent rapids. The neighbourhood of Port Churchill is practically destitute of all forest growth for miles in all directions, the vegetation being restricted to mosses and patches of coarse grasses along the edges of the water areas.

The main fresh water supply is obtained from the numerous small lakes in the neighbourhood, and is of excellent quality. The tidal flats are thickly strewn with boulders, some so large as to be visible above high water.

TIDES AND CURRENTS.

The main current in the harbour is along the indicated channel of the Churchill river, being approximately down the centre of the lagoon, but striking more against the eastern side towards the harbour mouth. With the ebb tide the current attains a velocity of from six to eight miles per hour, creating a somewhat difficult entrance for low-powered ships. The local pilots prefer to bring in their ships with the incoming tides.

It is quite useless for anything but a steam vessel to attempt the entrance at any other time. The current with the in-coming tide is much less, probably not exceeding 4 miles per hour. The highest tide observed was 13½ feet, and the lowest 8 feet, both probably being subject to modification with a longer series of observations. The water is always more or less salt near the entrance. At low tide fresh water may be obtained in the Churchill channel opposite the Hudson Bay Company's post, but when the tide is in this cannot be done.

ICE CONDITIONS.

The harbour usually freezes over about November 15. The open sea also freezes over during the winter four or five miles out from Churchill. The usual date for the opening of the harbour is about June 19. This last spring the harbour opened on June 7, or about 10 days earlier than usual. The ice lay off the coast and harbour this year, preventing the return of the survey party until July 13, when a start was made for York.

Five days more were lost by the ice pack off Cape Churchill extending about thirty miles out to sea, the boat crew declining to venture outside of this. The boat in use was only a small sailing coast boat not well adapted to ice work. Probably no serious difficulty would have been experienced by a steamer making Churchill within a few days of the opening up of the harbour on June 7. At intervals between June 7 and July 13, ice would be drifted back into the harbour by north winds. This ice floating up and down the harbour on the strong currents existing there constitutes a serious inconvenience and danger to ships at anchor and to docks and other works which may be constructed along the shore. The harbour has been reported on occasions to have been blocked by ice as late as August owing to long continued north winds. This liability of the harbour to being filled with loose heavy ice drifting up and down with the strong currents will need to be seriously considered in choosing the type of docks to be built here. As shown on the chart, the direction of the current tends to throw the drifting ice against the east shore, the only available place for docks at the present time. The ice, however, does not jam here very much but is swept on out by the strong current. Jams more frequently occur on the west side between the police barracks and Cockrill's Point..

ANCHORAGE.

At the present time very little shelter can be had at low tide by any ship drawing over 18 or 20 feet of water. Space to accommodate two or three ships of this size might be had, but anything larger would have to anchor almost in front of the entrance, which being about three-quarters of a mile allows the full force of the seas to be felt. The seas enter the harbour with sufficient force to cause a heavy swell to be felt throughout the harbour; in fact it is reported that at times it is impossible for the smaller boats to cross the harbour for two or three days at a time. The bottom, consisting of mud, affords a fairly good holding ground for anchors.

MATERIAL.

The material forming the harbour bottom is mud, thickly strewn wtih boulders of all sizes, and is probably a deposit from the Churchill river.

Excavating for ships berths close inshore to avoid the heavy drift ice will probably encounter solid rock as the solid rock in several places runs to the water edge.

MATERIALS FOR CONSTRUCTION.

Stone for construction purposes is very plentiful. Marble if you like to use it. All timber will have to be brought in either by rail or by ship.

DEFENCE.

Fort Churchill being practically upon the open sea can only be defended by strong forts and batteries placed in the immediate neighbourhood of the port itself.

PORT NELSON.

THE CHART.

The chart or map accompanying this report has been drawn to a scale of 4,000 feet to 1 inch, as being best adapted for the purpose of giving a comprehensive view of the general situation at Port Nelson. Lines are shown on the chart inclosing the portion which was found open all last season; other lines showing the portion where the ice did not attain a greater thickness than 10 inches. The shore line is plotted in from a traverse of the shores. Wherever the ice was of sufficient strength the sounding was done through holes, the method of locating being indicated on the chart. The soundings in the open water portion were taken from a boat hired from the Hudson Bay Company at York Factory, and were taken in May and June after the ice had gone out. This portion of the work was accomplished under great difficulties, as only five small buoys could be obtained to mark ten miles of river.

The boat, which was the best obtainable, was the usual coast boat of very shallow draft and clumsy rig, but endowed with special qualities in the matter of drifting.

Owing to this propensity and to the fact that the small buoys were not visible from one to the other, some difficulty was experienced in keeping the proper course. However, after ten days or two weeks hard work a sufficient amount of information was obtained to enable us to state with certainty that a good channel exists in which a ship drawing 26 feet might safely enter at all stages of the tide. Mr. R. D. Fry, the engineer in charge of the party, believes this chart to be a conservative representation of the actual conditions at Port Nelson, and that more extended surveys with the proper equipment will probably show a more favourable situation.

In order to get the best results it will be necessary to have a good strong boat equipped with power, preferably a good sea-going tug which could be fitted to burn either coal or wood, with a dozen large sized buoys and fifty or sixty smaller ones to mark the channel and points to be sounded.

GENERAL DESCRIPTION.

Port Nelson is at the mouth of the Nelson river, while York Factory is situated at the mouth of the Hayes river, about fifteen or eighteen miles from Port Nelson.

The site at the mouth of the Hayes was chosen by the Hudson Bay Company on account of the better communication with a greater number of inland posts, and also being a much smaller stream was not so difficult to navigate.

A great deal of tracking had to be done on both rivers, and the Hayes being much smaller, offered less trouble in crossing and re-crossing to take advantage of paths to tow from. The Nelson river is known locally as the North river, and Port Nelson is named by the British Admiralty as York Roads. Hudson bay vessels crossing to York Factory with supplies anchor about 15 or 20 miles from the post in York Roads. The site of York Factory was not chosen on account of its accessibility from the sea, but entirely on account of the easier communication with inland posts. The Nelson river proper may be said to end at Flamboro Head, which is the approximate limit to which the tide reaches. The estuary is a wide tidal flat with the main channel running approximately down the centre, finally discharging into an open sea abreast of Beacon Point, some 25 miles from Flamboro Head. At Flamboro Head the banks rise shear from the water edge to a height of 100 to 125 feet. From this point they gradually diminish in height on both sides of the river, until at Sam's creek on the north, and Beacon Point on the south, they are about ten feet above the water. The north shore is of clay with a sufficient fall for drainage, and covered with a fair growth of spruce.

A good site for terminals and town may be had in the vicinity of the point marked on the chart. Above this point the banks become higher and much more abrupt.

The south shore is also of clay with a good slope for drainage, but at the present time is covered with a very heavy growth of moss, rendering it very wet. An abundant supply of fresh water may be had either from the Nelson river itself or from various smaller streams and lakes in its vicinity.

TIDES AND CURRENTS.

The main current when the tide is ebbing is along the main channel, the current over the flats running approximately parallel to it. As the water lowers the currents over the flats converge more and more upon the main current till at low tide they are approximately at right angles to, and approaching it. On the ebb tide, the current flows at the rate of about 3½ miles per hour, being strongest at the mouth abreast of Beacon Point. Under favourable conditions the current here might rise as high as 4 miles per hour. So great is the discharge of the Nelson river that a perceptible current may be noticed several miles out to sea. With the incoming tide a current of about 2½ miles is obtained.

During the observations, extending from March 20 to June 10, the lowest tide observed was 6·9 feet and the highest 10·9. A longer series of observations will probably establish greater extremes.

The Admiralty charts give ordinary spring tides as ranging from 10 to 14 feet. It is probable, however, that any rise greater than 12 feet may be classed as an occurrence out of the ordinary, and due probably to some particular combination of wind and tide. The tides were found to be very variable, due no doubt, to the comparative shallowness of the water. This will require a long series of observations before ac-

curate tide tables can be prepared. This condition is not peculiar to Port Nelson, but applies generally to the tides in Hudson bay.

Salt water is never found above Beacon Point except when a very strong easterly gale is blowing with the incoming tide, when a slightly brackish taste may be detected two or three miles above Beacon Point. When the tide is ebbing fresh water is obtained far out to sea. Salt water is never obtained within many miles of the point selected for the terminals.

ICE CONDITIONS.

About the 20th December the river is usually frozen over at Seal Island or Flamboro Head. From this time on the ice gradually creeps down the estuary and out from the shore line until the first half of the month of April. About this date the weather moderated to such an extent that the thawing through the day counterbalanced the freezing at night and the ice began to recede towards Flamboro Head, the estuary being usually again clear of ice by May 15. The ice is broken up into large floes by the rising tide, and is borne off out to sea by the ebb tide. Owing to the appreciable current of the Nelson river being felt so far out to sea very little of this ice ever drifts back again. Between May 15 and June 1, the upper Nelson ice breaks up and passes down the centre of the estuary in the main channel, usually occupying from 24 to 36 hours in passing out to sea. During last winter no ice jams occurred inside of a line drawn from Beacon point to Sam's creek and a careful scrutiny of the shore line after the snow and ice had disappeared failed to find any trace of its ever doing so. The photos accompanying this report give a fair representation of the usual ice conditions at Nelson. Last winter was a shade colder than average.

The winter of 1878, an exceptionally mild winter, the channel remained open for 40 miles above Flamboro Head.

During the freeze up in the fall, a considerable quantity of slush ice comes down from the upper Nelson.

Last winter at Seal island and along the shore the ice attained a thickness of between 4½ and 5 ft. The average thickness at York Factory, where a record has been kept for many years, seems to be about 4 ft. 8 inches.

During the Winter more or less ice floats up and down the open channel with the tides, but being very scattered no jams ever occur.

ANCHORAGE.

The anchorage being some nine or ten miles in from the mouth of the channel no serious sea is ever experienced which may cause trouble to anything larger than canoes or row boats. The condition of the seas at Port Nelson will probably be found to resemble those experienced at Quebec on the St. Lawrence. The bottom is of sufficient stiffness to furnish a secure holding ground for anchors.

MATERIAL.

The material in the flats consists of blue clay with an occasional pocket of coarse sand and gravel with boulders scattered thinly around. In the channel the material is a very stiff blue clay, affording excellent holding ground for anchors. Probably all of the material can be handled by dredges at a very low cost and may be used for reclamation works around the docks. The bottom of the channel is swept clean and bare by the current of the Nelson, and is of so stiff a nature that the small anchor used by the Survey, probably weighing about 200 lbs. would frequently drag for some distance before taking hold. The material on the flats is not so hard on top, but becomes harder as depth is obtained.

MATERIAL FOR CONSTRUCTION.

Stone for the construction of breakwaters and other works may be cheaply obtained. About 75,000 or 100,000 cubic yards may be picked up along the tidal flats in the shape of scattered boulders. Up the Nelson river, about 40 miles above Flamboro Head is a splendid quarry where any required quantity can be had, and landed cheaply at the works by means of the Nelson river.

Piles in large quantities will be obtainable from various streams entering Nelson river and Hudson bay.

Cement and other materials, being brought in by water, should be comparatively cheap.

DEFENCE.

The defence of Nelson from hostile fleets will be comparatively easy, the long comparatively narrow channel approach being easily rendered impregnable by means of sea mines, and rendered otherwise dangerous by the removal or changing of buoys and other channel marks. Battleships which carry the extreme long range guns are of such a draft as to render it somewhat dangerous to manœuvre in less than 45 ft. of water, thus preventing their closer approach than 15 or 18 miles, a distance considerably greater then the effective range of even the heaviest guns. The lighter ships which might approach closer carry correspondingly lighter guns. The establishment of strong batteries and forts at Sam's creek would seem to be all that is necessary to render Port Nelson absolutely unassailable.

It might be mentioned here in passing, the greatly increased difficulty a hostile fleet would have on blockading the Atlantic coast of Canada were the Hudson bay route opened. The fact that ships may enter and leave Port Nelson all the year round is a fact worth remembering when the possibilities of war are considered.

(Sgd.) JOHN ARMSTRONG,
Chief Engineer Hudson Bay Railway Surveys.

WINNIPEG, Sept. 8, 1909.

The Pas Station, C. N. Railway.

The Pas to Split Lake.

Metishto Creek, Winter.

R. N. M. P., Churchill.

Mouth of Hayes River, York Factory.

York Factory.

Expansion of Nelson River.

Thoal Falls, Nelson River.

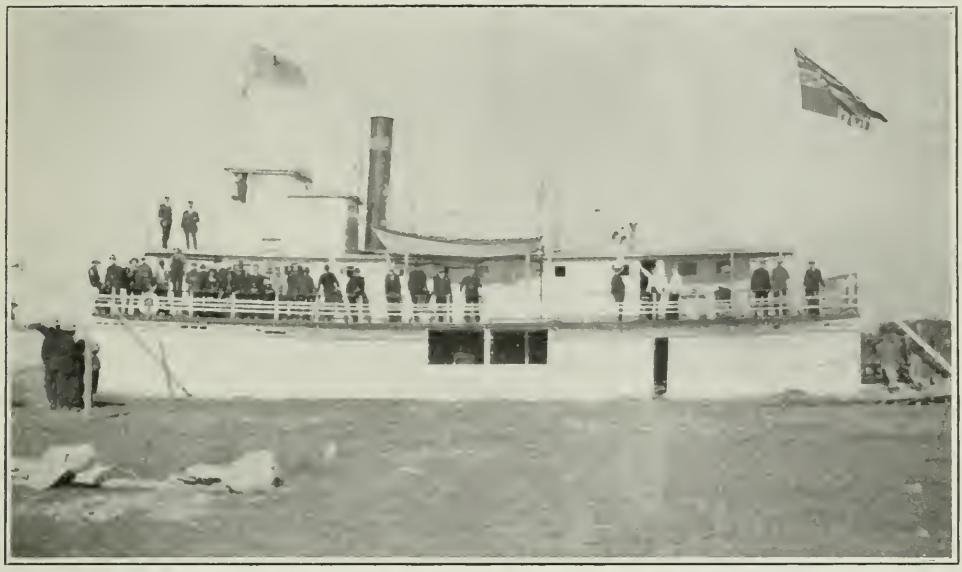
Log Jam, Metishto Creek.

Metishto or Limestone Creek.

Manitou Rapids, Nelson River.

Little Manitou Rapids on Nelson River.

At the Manitou Rapids, Nelson River.



Hudson Bay Company's Steamer "Saskatchewan."

Metishto Lake.

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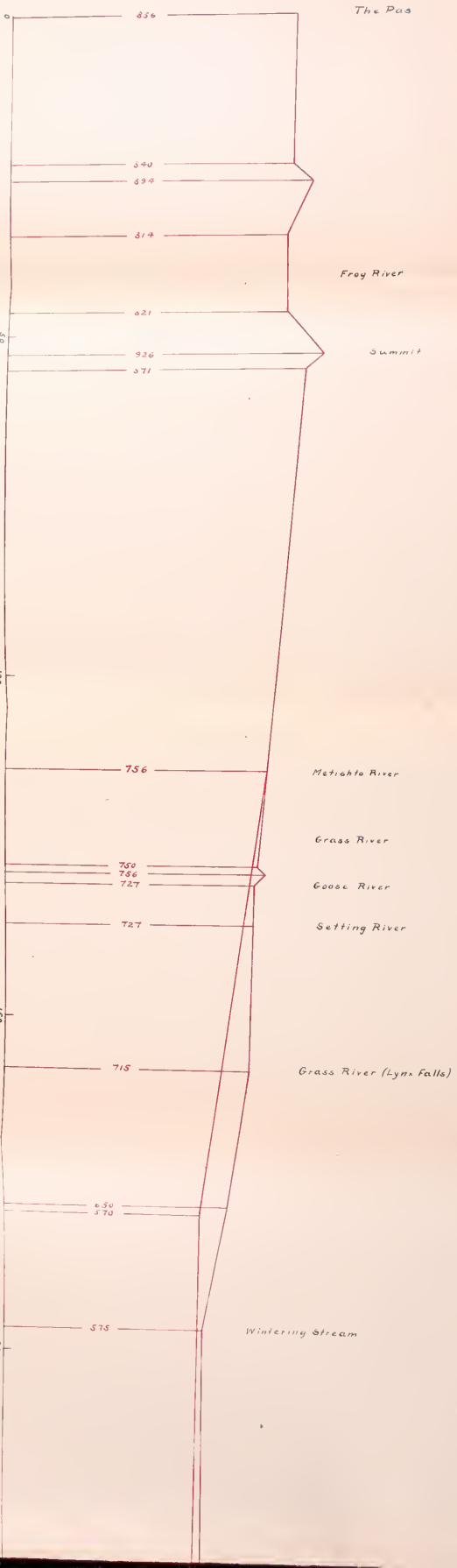
Canada. Parliament
Sessional papers 20 d.
Vol. 44 no 11 1910.

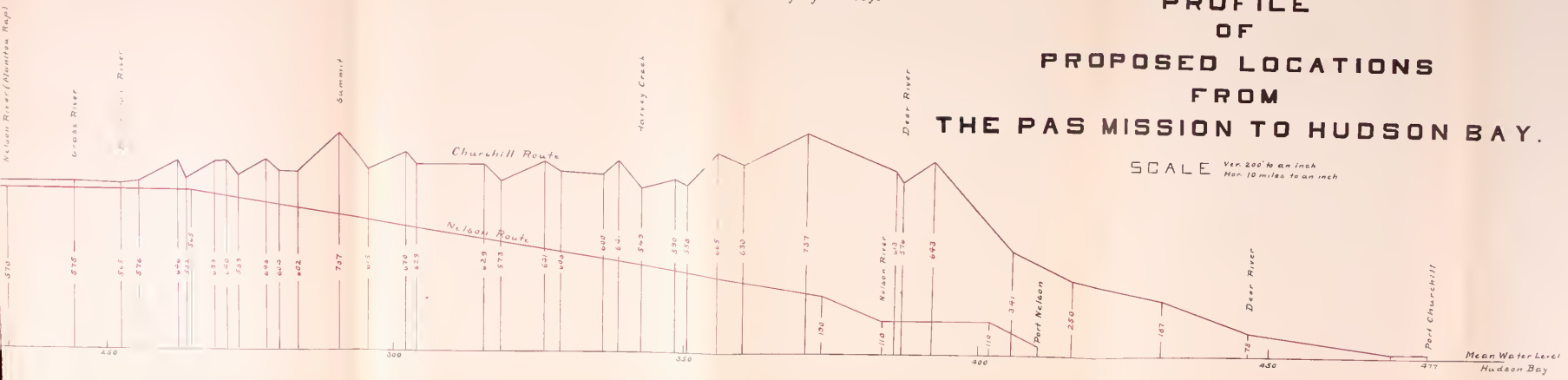

The Pas
856
0
540
634
514
Frog River
621
50
926
Summit
571
100
756
Metighto River
Grass River
750
756
727
Goose River
727
Setting River
150
715
Grass River (Lynx Falls)
650
570
575
Wintering Stream
200

THE HUDSON BAY RAILWAY.

PROFILE OF PROPOSED LOCATIONS FROM THE PAS MISSION TO HUDSON BAY.

SCALE Ver. 200' to an inch
Hor. 10 miles to an inch

John Armstrong
Chief Engineer
Hudson Bay Ry Surveys



Profile of proposed locations

The Pas Mission to Hudson Bay

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Canada Parliament
Sessional papers 20d.
Vol. 44. no. 11. 1910.

GENERAL MAP OF NORTH-WESTERN CANADA SHOWING RAILWAYS AND NAVIGABLE WATERS

Sgd John Armstrong
Chief Engineer
Hudson Bay Ry Surveys

Scale - 30 miles to an inch

HUDSON BAY

Fort Churchill

427 Miles

Fort Nelson

470 Miles

Nelson River

Churchill River

Stave River

Peace River

Lake Athabaska

Athabaska River

Shell Lake

Lake Winnipegosis

Lake Winnipeg

Lake Manitoba

MANITOBA

SASKATOON

PRINCE ALBERT

North Saskatchewan River

Battle River

Pasquia Hills

Carrot River

The Pas

LLOYDMINSTER

WETASKIWIN

WAINWRIGHT

LACOMBE

CALGARY

South Saskatchewan R.

MEDICINE HAT

MACLEOD

YORKTON

MELVILLE

REGINA

MOOSE JAW

WEYBURN

RAILTON

BRANDON

SOURIS

WINNIPEG

Winnipeg Ex Portage

Selkirk

Red River

PORT ARTHUR

DULUTH

LAKE SUPERIOR

MONTANA

NORTH DAKOTA

MINNESOTA

NOTE

- NELSON RIVER BASIN
- CHURCHILL RIVER BASIN
- MACKENZIE RIVER BASIN
- NAVIGABLE WATERS
- C.P.R. LINES
- C.N.R. LINES
- G.T.P. LINES
- G.N.R. LINES
- PROPOSED LINES

General Map North-Western Canada

Gen Doc
Can.
P

Canada Parliament
Sessional paper 20d.
Vol. 44. no 11. 1910.

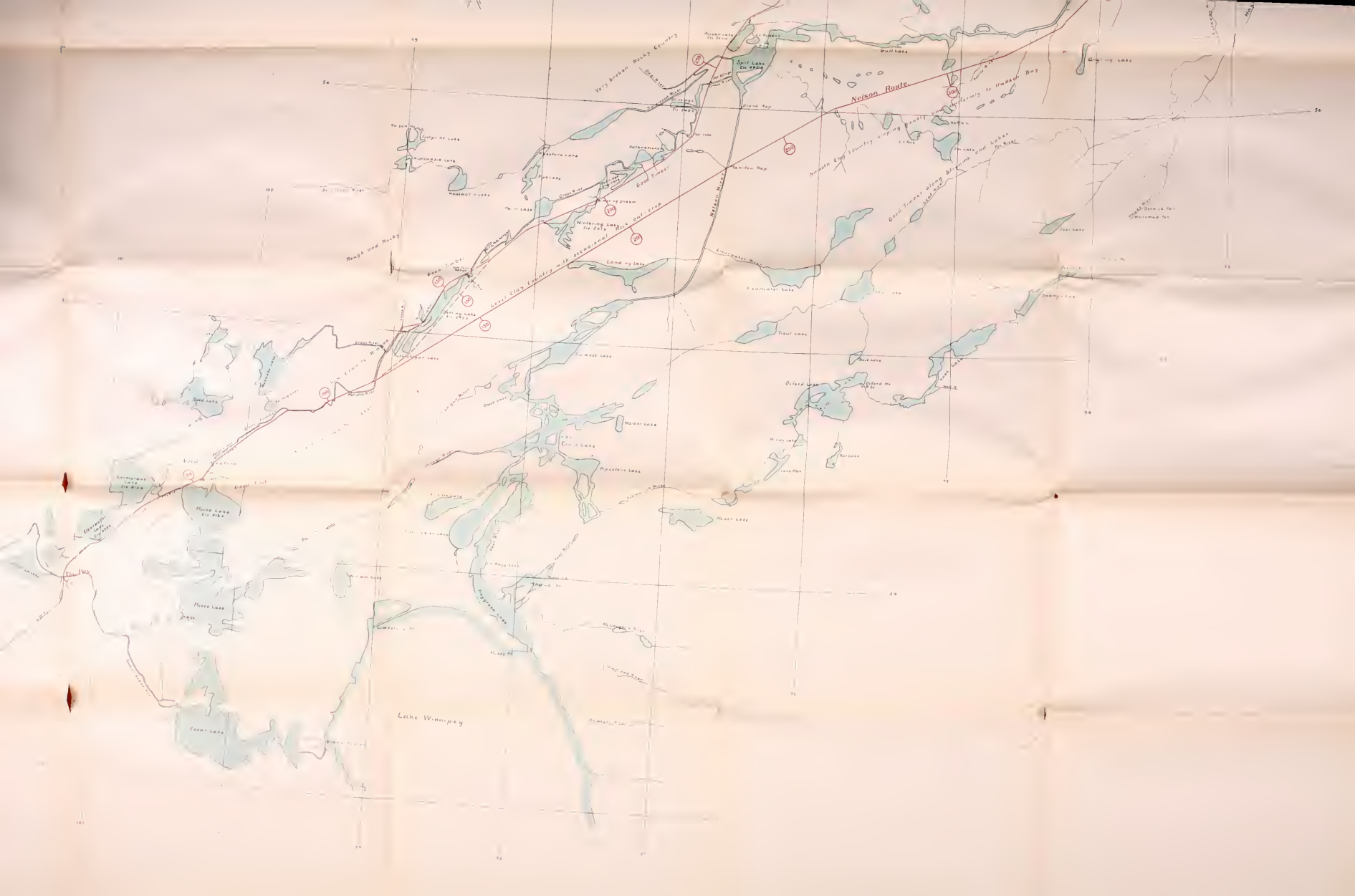
THE
HUDSON BAY RAILWAY.

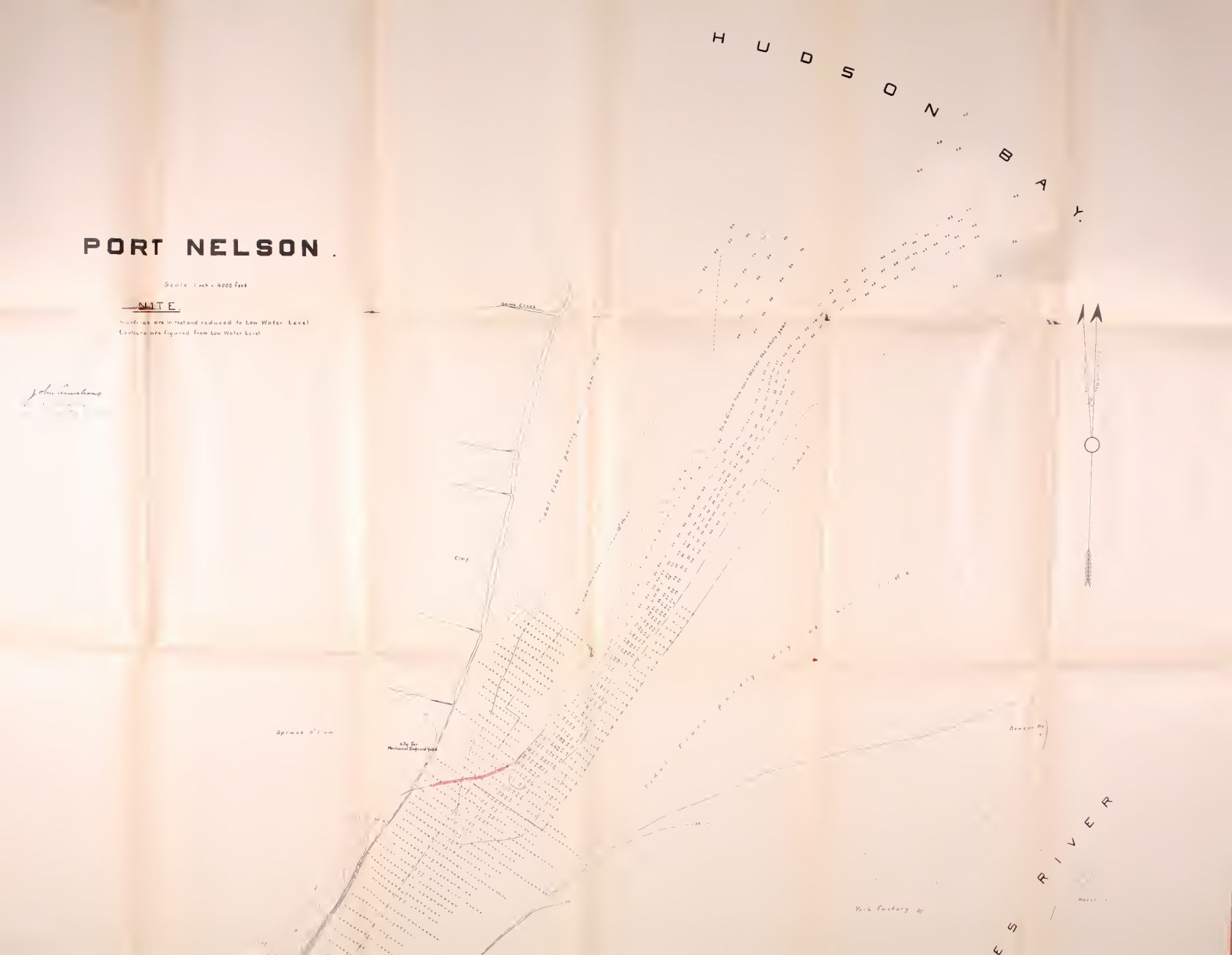
PLAN
SHOWINC
PROPOSED LOCATIONS
FROM
THE PAS MISSION TO HUDSON BAY.

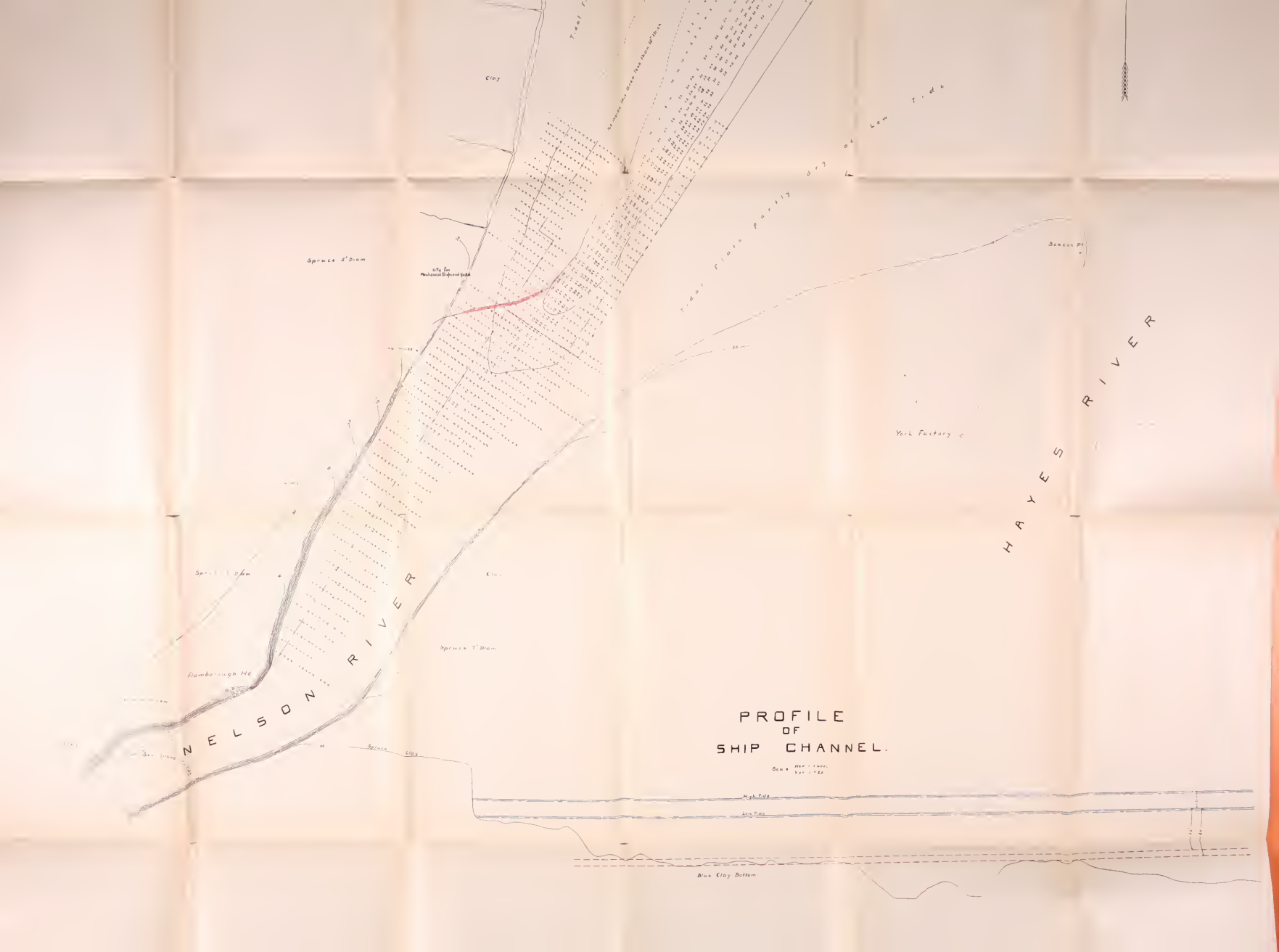
Scale 10 miles to an inch.

0 5 10 20 30 40 50 miles

John Armstrong
Chief Engineer
Hudson Bay Ry. Survey.


Nelson Route
Lake Winnipeg
Rough and Rocky
Good Timber
Very Broken Rocky Country
Gull Lake
Split Lake
Oxford Lake
Oxford House
Moose Lake
Cormorant Lake
Mosse Lake
Trout Lakes
Landing Lake
Wintering Lake
Pipestone Lake
Water Lake
Knee Lake
Duck Lake
Grand Rapid
Nelson River
Hudson Bay


HUDSON BAY.
PORT NELSON.
Scale 1 inch = 4000 feet
NOTE.
Soundings are in feet and reduced to Low Water Level
Contours are figured from Low Water Level
Boyne Creek
Clay
Spruce d'Eom
Tidal Flats Partly dry at Low Tide
Tidal Flats Partly dry at Low Tide
Benson Pt
York Factory
RIVER


Clay
Low Tide
Spruce S. Diam
Site for Mechanical Shipbuilding Yard
Beacon Pt
Tidal Flats partly dry at Low Tide
York Factory
HAYES RIVER
NELSON RIVER
Spruce T. Diam
Flamborough Hd
Spruce Clay
PROFILE
OF
SHIP CHANNEL.
High Tide
Low Tide
Blue Clay Bottom

FORTY-SECOND ANNUAL REPORT

OF THE

DEPARTMENT OF MARINE AND FISHERIES

1909

MARINE

PRINTED BY ORDER OF PARLIAMENT

OTTAWA
PRINTED BY C. H. PARMELEE, PRINTER TO THE KING MOST EXCELLENT MAJESTY
1909

[No 21—1909]

To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick; Baron Grey of Howick; a Baronet, G.C.M.G., &c., &c., &c., &c., Governor General of Canada.

May it Please Your Excellency:

I have the honour to submit herewith for the information of Your Excellency and the Parliament of Canada, the Forty-Second Annual Report of the Department of Marine and Fisheries, Marine Branch.

I have the honour to be,

Your Excellency's most obedient servant,

LOUIS-PHILIPPE BRODEUR,

Minister of Marine and Fisheries.

Department of Marine and Fisheries,

Ottawa, September, 1909.

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REPORT

OF THE

DEPUTY MINISTER OF MARINE AND FISHERIES

To the Honourable Louis-Philippe Brodeur,

Minister of Marine and Fisheries.

Sir,—I have the honour to report on the transactions of the Marine Branch of the Department of Marine and Fisheries for the fiscal year ending March 31, last..

The various branches were employed in the maintenance of aids to the navigation of Dominion waters, the construction of lights and fog signal towers, the establishment of other new aids and the improvement and repairs to the old. Hydrographic and tidal surveys were continued and new charts and tide tables issued. New lanterns and new types of lighting apparatus were substituted for older kinds; additional gas and signal buoys and sub-marine signals were put in position. Applications for new aids from the shipping interests received attention so far as the parliamentary appropriations would permit and the actual needs of navigation required. The local superintendence of the service by agents of the department as well as other outside officers was as usual performed. The general supervision of the service at Ottawa involved the issuing of directions and authority necessary in carrying on the operations of the department. The work of superintending and delivering supplies to light stations, attending the buoy service and conveyance of material for construction and repairs of towers, engaged the steamers and crews under the control of the department.

Winter communication between Prince Edward Island and the mainland and at River Ouelle and Murray bay, on the St. Lawrence river, was maintained without any interruptions. Icebreaking on the St. Lawrence river, at Cap Rouge, engaged the attention of the officers and crew of the *Montcalm* and the immense accumulation of ice at the point was successfully broken up and carried down by the current. The contracts for icebreaking at Fort William, Port Arthur, Collingwood, Midland and Depot Harbour, were carried out.

The work in the ship channel of the St. Lawrence river progressed satisfactorily and construction and repairs of steamers, dredges, tugs and barges at the Sorel shipyard proceeded in the usual way. Inspection of steamboats, live stock shipments and other cargo, was performed. Certificates were issued to marine engineers and masters and mates and medical attendance given at marine hospitals and by port physicians to sick mariners. Wireless telegraphy and meteorological stations were increased and the services improved generally.

The contracts for the construction of an icebreaking steamer for service between Prince Edward Island and the mainland and for a steamer for supply and buoy service above Montreal and Georgian bay, are being carried out.

In my report will be found summaries of reports of the officers of the department, but the reports themselves form appendices.

The Subdivisions of the Marine Branch and the expenditure in connection therewith are as follows:—

The construction of lighthouses and fog alarms.
The maintenance of lights, gas buoys and other buoys.
The lighthouse board, which decides the necessity for aids to navigation.
The hydrographic surveys.
The tidal surveys.
The ship channel St. Lawrence river and Sorel works.
Meteorological and magnetic service.
Investigations into wrecks.
Board of steamboat inspection.
Cattle shipments inspection.
Wireless telegraph service.
Signal service.
Life-saving service.
Marine hospitals.
Submarine signals.
Shipping under the Merchants Shipping Act.
Legislation and administration of laws relating to the Department of Marine and Fisheries.
Humane service in connection with seamen.
Wrecking plant subsidized.
Winter communication.
Removal of obstructions to navigation.
Examination of masters and mates and issuing certificates.
Naval militia.
Pilotage.
Government of ports and proclaiming of harbours in the Dominion.
Control of harbours and government wharfs.
Dominion steamers, Marine and Fisheries.
Hudson bay and navigation of northern waters.

APPROPRIATIONS AND EXPENDITURE.

OCEAN AND RIVER SERVICE.

Appropriation	$1,327,800 00
Expenditure	1,201,804 76
Expenditure less than appropriation	$ 125,995 24

PUBLIC WORKS CHARGEABLE TO CAPITAL.

Appropriation	$1,110,500 00
Expenditure	963,784 58
Expenditure less than appropriation	$ 146,715 42

LIGHTHOUSE AND COAST SERVICE.

Appropriation	$3,008,100 00
Expenditure	2,721,801 58
Expenditure less than appropriation	$ 286,298 42

SCIENTIFIC INSTITUTIONS AND HYDROGRAPHIC SURVEYS.

Appropriation	$ 392,250 00
Expenditure	296,579 30
Expenditure less than appropriation	$ 95,670 70

MARINE HOSPITALS AND SHIPWRECKED AND DISABLED SEAMEN.

Appropriation	$ 58,000 00
Expenditure	56,993 87
Expenditure less than appropriation	$ 1,006 13

STEAMBOAT INSPECTION AND FOG ALARMS.

Appropriation	$ 51,100 00
Expenditure	41,226 47
Expenditure less than appropriation	$ 9,873 53

CIVIL GOVERNMENT SALARIES MARINE AND FISHERIES.

*Expenditure	$ 163,222 36
Appropriation	122,250 00
Expenditure more than appropriation	$ 40,972 36

CONTINGENCIES.

Appropriation	$ 21,150 00
Expenditure	20,320 92
Expenditure less than appropriation	$ 829 08

MISCELLANEOUS.

	Appn.	Ex.
To repay A. Cushing & Co., *re* seizure of schooner *Evolution* in 1893	$ 800 00	$ 800 00
Investigation Marine and Fisheries Department	55,000 00	31,316 90
Returns to parliament	500 00	681 02
	$56,300 00	$32,797 92
	32,797 92	
Expenditure less than appropriation	$23,502 08	

* NOTE.—A number of outside officers that were previously paid out of separate votes were transferred and paid out of civil government from September 1, 1908.

Total appropriation, Fisheries Branch, not including civil government and fisheries bounty	$1,324,900 00
Total expenditure same branch	791,728 69
Expenditure less than appropriation	$ 533,171 31
Grand total appropriation	$7,472,350 00
Grand total expenditure	6,290,260 45
Grand total expenditure less than appropriation	$1,182,089 55

The statement of expenditure in detail is Appendix No. 5 to this report.

LIGHTHOUSE SERVICE.

The lighthouse service of the Dominion is divided as follows:—The Ontario division, embracing all lights from Montreal westward to the Northwest Territories; the Quebec division, extending below Quebec and including the St. Lawrence river from Platon, the Gulf of St. Lawrence and Strait of Belle Isle, Cape Ray, and Cape Anguille, Newfoundland; the Montreal division, including the St. Lawrence river from Montreal to Platon; the Nova Scotia division, including St. Paul's island, Sable island and Cape Race, Newfoundland; the New Brunswick division, the Prince Edward Island division and British Columbia division, each including lights within the provincial boundaries.

The lighthouse construction service under the chief engineer includes the preparation of plans, draughting of specifications, locating of light and fog alarm stations and construction of all buildings connected therewith. Personal inspection is made by the Chief Engineer or his assistants and by district engineers. Notices to mariners are issued by this branch giving to mariners the exact location, latitude and longitude of stations, the kind and order of lights established, also prompt notice of accidents or changes in lights. Similar notices are issued in connection with all aids to navigation. During the past year 127 notices were issued covering 321 cases of improvements and establishment of new aids.

During the past year, twenty-seven new lighthouses, thirteen fog alarms and two acetylene beacons, were established.

The total number of light stations, separate fog alarm stations and lightships in the Dominion is 968; lights attached to these stations 1,193; steam fog horns, bells and fog guns, 123; the lightkeepers and engineers of fog-alarms according to the pay-lists number 921; gas buoys, 234; whistling buoys, 23; bell buoys, 57; submarine bells, 9.

Eight new lights were established in Nova Scotia; three in New Brunswick; eight in Quebec and eight in Ontario.

The chief engineer's report relating to lighthouse construction, repairs, tidal and hydrographic surveys, &c., contains information relating to these subjects in detail.

Ice breaking at Collingwood, Midland and Depot Harbour, Georgian Bay, and in the approaches to Fort William and Port Arthur in Lake Superior, was performed in connection with this branch. A report of the work done appears in the chief engineer's report. The same report contains details of removal of obstructions to navigation and the cost. The principal repairs to stations and improvements as well as the

establishment of new aids are subjects reported upon and some account given in detail. The report of the inspector of fog-alarms is appended to the chief engineer's report.

Among the subjects receiving special attention was the construction of reinforced concrete towers and increase of standard diaphones which have proved so successful as fog-signals. The tidal surveys and the report of the officer in charge, enumerating the tide tables so far prepared, and the effect of currents in the waters surveyed, is also contained in the chief engineer's report. The plans, specifications and other work done in the drafting room are stated in an 'inclosure' accompanying his report. It will be seen that descriptions of lights and other aids and sailing directions requiring special care in the compilation are mentioned.

Agents at Halifax, St. John, Charlottetown, Quebec and Victoria as usual, directed the delivery of material for repairs and lighthouse supplies, consisting of illuminating oil, paint, paint oil, coal for fog-alarms, brooms, buckets, soap, matches, towels and other necessary articles for maintaining and keeping the lighthouses clean. The supplies were delivered by the Dominion steamers under the supervision of the superintendents of each agency who reported to the agents and the agents to the department. The superintendent of lights above Montreal whose district includes Ontario has his office in the department at Ottawa, and reported directly. The steamer *Neepawah* was chartered for the delivery of supplies in 1908, to the lights above Montreal, but while on her trip ran ashore in a fog near Peninsula harbour in Lake Superior. It was necessary to transfer the supplies to another boat to continue the trip to the remaining lighthouses.

In connection with the lighthouse service a new classification of lightkeepers' salaries was made to go into operation from April 1, 1908. Regulations have been published on this subject. The former practice of supplying lightkeepers with fuel, light, water, horse keep, &c., has been discontinued with the exception of at fog alarm stations, where keepers may heat their dwellings with fuel supplied the station.

The report of W. P. Anderson, chief engineer, form appendix No. 1 to this report.

ILLUMINANTS, ILLUMINATING APPARATUS AND GAS BUOYS.

In the report of the Commissioner of Lights will be found a detailed account of the work done in the light and buoy branch. This branch attends specially to lighting apparatus, warning and gas buoys and illuminants. The principal work performed has been the installation of lanterns and their attachments at new lighthouse stations, the substitution of modern dioptric apparatus in a number of major coast lights and the improvement of minor lights by the use of petroleum vapour as an illuminant, and the maintenance of lights throughout the Dominion.

The lighting apparatus now in use in the Dominion lighthouse service consists of lanterns, in which are operated distinctive lights known as quick flashing lights, occulting lights, fixed lights (red and white), anchor lenses for pole lights and a few Wigham 30 day lights. The reflector or catoptric apparatus is used for revolving and fixed lights. The illuminants used consist of oil, oil vapour, and acetylene (compressed and automatically generated) and pintsch gas.

The submarine bell service has given, during the year, excellent service. The improved bells introduced in the summer of 1907 have not required any attention with regard to readjustment. Four shore stations and five lightship stations are in

successful operation, one accident only occurring and that to the cable at Negro Head, New Brunswick, which failed, requiring the cable to be raised and repaired. The submarine stations in operation are at Negro Head, Yarmouth and Lurcher lightship, all in the Bay of Fundy; Louisburg, Cape Breton; Chebucto Head, Nova Scotia; Anticosti lightship in the Gulf of St. Lawrence and White island, Red island and Prince shoal lightships in the St. Lawrence river.

The coast buoy service in each agency was carried out by the Dominion steamers, but it was necessary to charter the *Restigouche* in New Brunswick, and the *Joliffe* and *Cascade* in British Columbia also for this work.

From the Dominion lighthouse depot at Prescott, lighthouse apparatus was distributed throughout the Dominion. The stores consisting of lamps, burners, lenses, reflectors and other lantern attachments are kept in stock. The repair shops were kept occupied during the year and lighthouse apparatus of a special nature was manufactured. Photometric and other tests are made at the depot from time to time to determine the efficiency of modern apparatus and to establish comparisons between the older types and kinds and the new. Upon these comparisons is determined which are the effective optical appliances, mechanism and illuminants. In this connection an important advance has been made in the development of a revolving mercurial joint, which makes possible the use of petroleum vapour as an illuminant in conjunction with revolving reflectors. By this means a light of 48,000 candle power can be manufactured at a moderate cost. Diagrams showing a high power catoptric revolving light in a lantern 10 feet in diameter, and high pressure revolving joint will be found in the illustrations of this report and a description of the advance on the familiar mercurial seal, will be found in the Commissioner's report.

The buoy service in the St. Lawrence river between Kingston and Montreal has been conducted as usual by the steamers *Scout* and *Reserve*, having their headquarters at the Prescott depot. The buoys and moorings were stored in the yard and upon the docks at the depot during the winter where they received overhauling and repairs and were made ready for putting in position when navigation opens.

In the Parry Sound agency, work was performed in the maintenance of acetylene lights and the location of gas buoys in Georgian bay. The buoys were placed and taken up by the aid of a derrick scow and a chartered tug. The new dock has been used for storing buoys for the winter and for the work of overhauling and preparing the buoys for placing in position.

In British Columbia many changes and improvements were made in acetylene and other coast buoy service by the addition of new buoys. In this agency the new scow was an efficient aid in handling heavy buoys and moorings. The purchase of the steamer *Newington* for moving the scow and for other service, enabled the officers of that agency to accomplish much better work and more extensive operations than formerly. The rapid development of water traffic made the establishment of new aids necessary.

Five 'inclosures' accompany this report containing details by provinces of new aids to navigation and improvements in the lights for 1908-9; the number of light stations, lights, fog-alarms and warning buoys in operation; the number of gas buoys and gas buoy stations throughout the Dominion at which gas buoys were in service and an outline chart of the Atlantic coast of Canada showing quick flashing lights

of the hyper-radial and first order, second order, third order, third order small model and fourth order in operation during the fiscal year 1908-9.

The report of the Commissioner of Lights forms Appendix number 2 of this report.

RIVER ST. LAWRENCE SHIP CHANNEL.

The report of Mr. V. W. Forneret for the superintending engineer of the work in the St. Lawrence river ship channel contains a short historical account of the improvements made in the ship channel since its commencement and showing the total expenditure to the end of the season of 1908 to be $7,208,543.50 for dredging, and $3,501,449.96 for plant, total $10,709,993.46, and the total number of cubic yards dredged to be 61,767,292.

An outline of the projected work for the future shows the extent of dredging that will be required to complete the channel for the largest and deepest liners afloat. The national character of the project has long been recognized and the country has reaped the benefit from the amount of trade seeking an inlet and outlet by the St. Lawrence route. The rapid advance in the construction of vessels of the largest size engaged in ocean traffic and seeking the St. Lawrence route, will make a deeper channel imperative. The surest indication of the growing traffic, by large steamers, has been the establishment of several new lines of these vessels, some of which are the 10,000 and 15,000 ton ships that arrive at Montreal and leave day and night. These vessels after crossing the shortest track of the open ocean, have a sheltered waterway of 900 miles. The progress of deepening and widening the channel in certain localities, during the season of 1908, has been an important step in the continuous work towards carrying out the project between Montreal and Beaujeu bank below Quebec.

At the end of the season of 1908, there was a completed channel to a depth of 30 feet at extreme low water from Montreal to Cape Levrard, 4 miles below Batiscan, a distance of 104¼ miles below Montreal. Below Batiscan, advantage is taken of the tide during low water season to obtain this depth to pass Cap à la Roche and St. Augustin bar. The available depth in the Cap à la Roche dredged channel is indicated by the St. Jean des Chaillons semaphore; this was put in operation for the season on June 17, 1908. The available depth over the undredged St. Augustin bar is indicated by the semaphore at St. Nicholas, which was started for the season on June 24, 1908. The datum adopted for low water is the stage of the lowest water in 1897 being the lowest on record for any season, but in the summer of 1908 the river was at low water. The depth in the channel, however, from Montreal to Batiscan was 30 feet and from Batiscan at extreme low tide it was the same. In the first part of the season the depth was from 36 to 42 feet. The water lowers in September and October; the highest water in 1908 was 42 feet 4 inches and the lowest 30 feet.

There has practically been no filling in of the ship channel since its commencement nor boulders and this has been ascertained by the practice of sweeping the channel. Mr. N. B. McLean, C.E., with an assistant, has been in charge of the sweeping plant, which consists of a twin-screw steamer and testing scow.

The work of deepening the St. Thomas channel, Quebec, was begun late in the autumn of 1907 and at the close of the season of 1908 good progress had been made. The St. Thomas flats consist of clay and sand and should be finished in about three or four years.

The work remaining to be done in the length of the channel is the dredging of about two miles of shale rock at Cap à la Roche; about one mile at Grondines; about one mile at St. Augustin bar, also about one mile of widening at St. Croix and 5¼ miles of widening in Lake St. Peter. The widening in this lake will be completed, it is expected, in 1909; the work at Cap à la Roche will take from three to four years to finish. The dredged ship channel will then have a width, whole length, of 450 feet in the straight parts and from 500 to 750 feet at the bends, but at Beaujeu bank the width everywhere will be 1,000 feet and this part, it is expected, will be completed at the end of the season of 1909.

The plant available at present for work in the channel consists of two elevator dredges for soft clay, four for hard pan and shale rock; two hydraulic dredges for soft mud discharged by pipe; one sand pump hopper sea-going dredge; two stone lifters and a number of tugs, scows, &c. The sea-going hopper dredges are used below Quebec. An addition will be made to the plant by a large sized spoon dredge now under construction for the upper reaches of the river; a steel hull elevator dredge is authorized and a new stone lifter.

The marine signal service was especially useful during the latter part of the season of 1908 when so much fog and smoke prevailed. The smoke and fog were denser than at any previous time in the history of the work, causing suspension of operations for days at a time.

The annual inspection was made of the channel by the head of the department, being accompanied by a staff of the officers and the representatives of the Shipping Federation, Montreal Board of Trade, La Chambre de Commerce, the mayor of Quebec, representatives of the Montreal Harbour Commissioners and the Montreal and Quebec pilots. At the same time the inauguration of a new code of signals took place; the signals are to be used between stations and passing vessels, by flags in the day and lights at night.

Reference is made in the report of Mr. Forneret to the work of the *Montcalm*, in breaking and removing the ice bridge at Cap Rouge in the river, during the winter, enabling the ice to pass down with the current, causing the opening of navigation about three weeks earlier than would have been the case if naturally opened. The work of the *Montcalm* will form a separate subject of this report.

The report of the ship channel contains several carefully prepared tables showing in detail the amount of work performed. The dredges, tugs, scows, stone lifters, &c., needing extensive repairs during the summer were taken to the Sorel shipyard where the work was done. The whole plant, at the close of navigation, was put in winter quarters at the Sorel shipyard where the necessary overhauling and repairs, are now being completed and improvements made for next season's operations. The total number of yards dredged during the season, was 5,896,737 at a cost of $479,686.03 or 8·44 cents per cubic yard.

The report on the ship channel work forms Appendix No. 3 of this report.

SOREL SHIPYARD.

The Sorel shipyard has been more immediately under the direction of Mr. L. G. Papineau, Assistant Director of the Shipyard. At the opening of the fiscal year, the yard was working to its fullest capacity completing repairs and improvements to the

St. Lawrence ship channel fleet. As usual all the dredges, tugs, stone lifters and scows were overhauled and made ready for the commencement of work. There were six elevator dredges, three suction dredges, nine tugs, three twin screw wooden boats, two stone lifters, fifteen dumping scows, four coal barges, one floating shop for minor repairs, three scows with houses on them for lodging spare crews. In addition the following vessels belonging to other branches of the Marine and Fisheries service were overhauled and made ready for the season's work, viz.: the *Shamrock* and barge *Acetylene* of the maintenance of lights branch; the *La Canadienne* and *Maisonneuve* of the lighthouse service; the *Verchères, Hosanna* and *Alpha* employed in the construction of lights.

The new vessels under construction at the same time were dipper dredge No. 19; dredge No. 24; tug No. 22 for lighthouse work in the upper lakes and one floating shop; stone lifter, No. 20; lighthouse tender, No. 21. This tender is of steel, length 222 feet over all, beam, 34·8 feet, depth moulded 22 feet, draught 15 feet, speed to be 11½ knots with triple expansion engines. The other construction was two flat scows 63 feet by 27 feet 8 inches; two dumping scows of a capacity of 200 cubic yards; construction No. 29, a wooden tug of light draft and construction, No. 30, a derrick scow for work on the Ottawa river.

Tug No. 22 was launched and named the *Lambton,* this vessel was about completed at the end of the fiscal year for work on the upper lakes; dipper dredge, No. 19, was launched in July and at the end of the fiscal year most of the machinery had been installed. The floating shop was completed and put in service in the ship channel in August, 1908.

During the summer the following vessels were hauled out on the slipway, viz.: the *De Lévis* for minor repairs, dredge No. 3 for extensive repairs, damage due to an accident; the tug *Jessie Hume* for painting and securing iron sheeting; the tug *Montcalm,* tug *Hosanna,* scow No. 9, tug *Alpha,* scow No. 14, tug *Ottawa,* tug *Reserve,* tug *Champlain,* tug *Emilia,* scow of St. Ours lock, tug *Frontenac,* tug *Verchères,* scow No. 10, and barge *Acetylene,* for repairs to propellers, rudders, shafting or hulls. In addition the *Lady Grey, Maisonneuve, International* (of the Public Works Department) and the *Constance* had repair work done. The last mentioned steamer had a new boiler built and installed. Three lightships wintered at the yard and were painted.

Work for other departments is often done at the Sorel shipyard; the stone lifter of the Public Works Department was repaired.

Ordinary repairs were made to the buildings of the yard but building No. 4 had alterations which increased the space for offices; a set of powerful bending rollers was added to the plant, capable of bending boiler plate 1¼ inches thick 14 feet in diameter and 12 feet 6 inches wide. Thirteen buildings were painted.

About 2,000 feet of new track were added to the shipyard narrow gauge railway, six new switches and two right angle crossings were made. Wharf No. 4 was enlarged by filling in at the rear.

Four new buildings were erected in the course of the year; one known as No. 22—50 by 32 feet with a plank platform 100 feet by 36, is a storehouse for castings; No. 23, is a dry kiln with two compartments, 60 by 18 feet; No. 20, used for storing dry lumber; No. 21, is a boiler room for heating the drying kiln, saw-mill, paint shop, asbestos shop and mould loft.

Seven hundred feet of main line pipe for water works was laid and four hydrants were placed and an earthenware drain pipe was laid for draining between the mould loft, drying kiln and lumber store.

The force employed varied from 623 to 920, average number of workmen was 729. The financial statement included in the report of the assistant director of the yard shows the expenditure to the end of March, 1909, to have been $1,132,279.40. The report forms Appendix No. 4, of this report.

BUOYS AND BEACONS.

The buoys and beacons include those beacons which are not enumerated in the list of lights.

New buoys of several kinds were placed during the year. These buoys consisted of lighted buoys of different sizes and types, automatic whistling, bell, conical, spherical, can, platform, spars and barrel buoys. The highest type of buoy is the gas whistling and bell buoy, which shows its light a great distance and in thick and foggy weather is an effective warning buoy. Several gas and whistling buoys and several gas and bell buoys, were added to the number already in position on the Atlantic and Pacific coasts. The substitution of gas lighted buoys for unlighted buoys in many localities has taken place. This work has involved an increased expenditure. The total expenditure for buoy service for the Dominion during the fiscal year was $161,838.25. The contract system for maintaining the small buoys in the numerous bays, inlets, rivers, lakes and harbours has been found to work most economically but not always as efficiently as desired. The inspection was performed by harbour masters in each locality and a general inspection was made by the inspectors of buoys or agents in each province.

Two derrick scows have been added to the equipment for handling heavy buoys, one in British Columbia and one in Georgian bay. These scows have been valuable auxiliaries in placing and taking up buoys and are towed by steamer or tug.

The expenditure in connection with each province for the fiscal year, was as follows:—

Nova Scotia	$ 31,038 04
New Brunswick	27,496 10
Quebec	53,733 01
Ontario	19,242 16
British Columbia	26,969 93
Prince Edward Island	3,359 01
	$161,838 25

SESSIONAL PAPER No. 21 .

LIST of Buoys maintained by the Department of Marine and Fisheries in Canadian Waters in 1908.

ONTARIO.

	No. of Buoys.
Amherstburg, including Bois Blanc	46
Bay of Quinte (two contracts)	19
Bear's Rump	1
Big Duck island, bell buoy	1
Blind River	4
Byng inlet	7
Collingwood	15
Clapperton channel	9
Georgian Bay	13
Georgian Bay gas buoys	8
Green shoal	1
Goderich	5
Goderich, gas-buoy	1
Gananoque, gas buoys	3
Hawkesbury	15
Kaministiquia	9
Lake Erie, gas buoys	4
Lake of the Woods, including bell buoys	115
Lake Simcoe	5
Lake Superior, including bell buoy	8
Little Current	8
Lone Rock, gas and bell buoy	1
Midland	7
Murray Canal and Presqu'île bay	23
Lake Temiskaming	3
Napanee	14
Niagara, bell buoy	1
North Sisters rock	4
Orillia	18
Pancake shoal, bell buoy	1
Parry Sound	24
Campbells rock	1
Pembroke	23
Pointe au Baril, beacons	15
Pointe au Baril, buoys	4
Penetanguishene	4
Port Arthur, gas buoys	3
Port Rowan	12
Rainy River, beacons, pairs	11
Rainy River, buoys	14
River Thames, gas buoy	1
River Thames, buoys	8
Rondeau	6
St. Lawrence river, Montreal to Kingston, spars	
St. Lawrence River, Montreal to Kingston, can buoys	
St. Lawrence River, Montreal to Trenton, and above, gas buoys	45
Sault Ste. Marie	21
Sault Ste. Marie, canal approaches	25
Sault Ste. Marie, gas buoys	2
Seine River and Grassy lake, piles	30
Seine river, buoys	10
South Baymouth	4
Stokes Bay	6
Sturgeon bar, gas buoy	1
Temagami lake, 4 beacons and	31
Thenton	13
Victoria island, Lake Superior	3
Waubashene	37
Winnipeg river	13
Saugeen river	9
Sturgeon river	26
St. Clair river, gas buoy	1
Sarnia, gas buoy	1
Southampton, gas buoy	1

QUEBEC.

Agnes	1
Amherst harbour	8
Anse à Gascons	1
Anse à Beaufils	1
Barachois de Malbaie	1
Bonaventure	9
Cap Chat	1
Cape Cove	1
Cap Meule	1
Carleton point	1
Chicoutimi	15
Cock point	1
Chaudière basin	7
Cape Despair	1
Douthe's point	1
English bay	3
Eschourie rock	1
Fox river	1
Gaspé	6
Grand Entry	17
Griffin Cove	1
Gros Cap-aux-Os	1
House harbour, Magdalen islands	7
Lake Temiskaming, viz:—	
Schooner island	3
Opemigon Narrows	4
Montreal river	3
North Temiskaming	9
Couverette's Camp	1
Brown's Point	1
Lake St. John—	
River Ashuapmuchuan	
River Mistassini	
River Peribonka	
Roberval harbour	
25 beacons and	110
Little river east	1
Lachine rapids	7
Maria	1
Matane	3
Mont Louis	1
New Richmond	3
North channel, Island of Orleans	10
Nouvelle	2
Paspebiac	1
Pentecost	1
Percé	2
Port Daniel	1
Portneuf	9
Restigouche river	10
Restigouche river, gas buoys	6
Richelieu river, balises	
Little river, west	1
Petit Rocher	2
Richelieu river, St-Antoine to Chambly	35
Richelieu river, above St. Johns	21
Rigaud river	7
Rivière à la Pipe, Lake St. John	8
Rivière des Prairies	10
Ste. Adelaide de Pabos	1
Ste. Anne river	1

List of Buoys maintained by the Department of Marine and Fisheries, &c.—*Con.*

QUEBEC—*Con.*

	No. of Buoys.
St. Thomas	8
St. Godfroy	1
St. Lawrence river, between Platon and Montreal, gas-buoys	65
St. Lawrence river, between Platon and Montréal, unlighted buoys	194
Serpent reef	1
St. Placide	52
Maintained by Quebec agency, gas-buoys	30
Maintained by Quebec agency, unlighted buoys	15
Maintained by Quebec agency below Quebec, bell-buoy	1
Maintained by Quebec agency below Quebec, Whistling-buoy	1

NEW BRUNSWICK.

Bathurst	26
Baie Verte and Port Elgin	36
Bay du Vin	12
Beaver and Blacks harbour	9
Black brook, Miramichi river	3
Black Lands gully	12
Buctouche, 34 stakes and	22
Buctouche river, bushes and	260
Bartibogue	13
Campobello	10
Caraquet	21
Cocague, stakes, 30 and	11
Dalhousie and Restigouche	10
Digdequash	5
Dipper harbour	3
Dorchester	3
Grande Anse	4
Grand Lake and Salmon river bushing	73
Grand Manan, 1 spindle and	28
Great Shemogue	7
Hatfield point, bushes	..
Harvey	7
Kouchibouguac and Black river, bushes	..
Lepreau	3
Letite and Back bay, 1 spindle and	14
Little Shemogue, 1 beacon and	5
Little Shippigan	12
Magaguadavic	13
Maquapit and French lakes, 20 stakes and	4
Miramichi, 9 winter buoys, 1 lightship and	22
Miscou	8
Musquash	7
Neguac	21
Little Aldouane, 25 bushes and	5
Neil harbour	1
Napan river, 24 stakes and	3
Northwest arm, Miramichi	6
Northeast arm, 24 stakes and	8
Ox island, St. John river	5
Petit Rocher	2
Pisarinco	2
Pokemouche, number of bushes and	7
Quaco (maintained by C. G. S.)	3
Richibouto and Albion	33
Richibuctou, Rexton and Browns yard	30
Shediac	18
Shediac, north of island, 20 bushes and	2
Shippigan, 17 pickets and	20
St. Andrews	13
Ste. Croix ledge	11
St. John river	77
St. Louis, 15 bushes and	2
St. Simon, bay Caraquet	4
Tabusitac	18
Tracadie, South Gully, 30 bushes and	5
Tracadie, 100 bushes, North Gully	11
Tynemouth creek	5
Washademoak, 144 bushes and	2
Waweig river	2
West Isles, 4 spindles and	23
Maintained by agency—	
(gas-buoys)	12
(gas and bell, combined)	1
(gas and whistling, combined)	10
(can and conical buoys)	..
(whistling buoys)	..
(bell-buoys)	..
(bell boat)	..
(lightships)	..

PRINCE EDWARD ISLAND.

Bay Fortune	3
Beach point	3
Bedeque	11
Brae harbour	5
Brudenell river	4
Cardigan, Lower	6
Cardigan, Upper	16
Cascumspec, 12 stakes	14
Charlottetown, 20 stakes	21
Cove head	3
Crapaud stakes and	5
East river (Hillsboro')	17
Egmont bay	12
Egmont south, 8 stakes and	2
Georgetown	14
Goose harbour	2
Grand river, 1 beacon and	12
Grand river, lot 14	8
Indian rocks	1
Malpeque	16
Miminegash	6
Little channel	3
Montague	7
Murray harbour	41
New London	9
Orwell and Vernon river, 36 bushes	6
Pinette, number of bushes and	5
Port Hill	12
Pownal	7
Rollo bay	3
Rustico	5
Savage harbour	2
Souris	4
St. Peters harbour	10
Summerside	10
Tracadie	7
West point	1
Wood island	5
Maintained by agency (signal buoys)	4
Maintained by agency (conical)	4
Maintained by agency (gas buoys) including Zephir rock.	5

LIST of Buoys maintained by the Department of Marine and Fisheries, &c.—*Con.*

NOVA SCOTIA.

	No. of Buoys.
Advocate harbour	6
Apple river	8
Arichat	20
Argyle river and sound	9
Avon river	6
Amherst Basin	4
Barrington	31
Bear river	17
Beaver harbour	8
Blandford	5
Bridgewater	10
Brule	5
Canning or Habitant river	6
Canso and St. Andrew passage	31
Cape Negro or Northeast harbour	17
Cariboo	6
Chester	25
Cheticamp	12
Chezzetcook and Petpiswick	6
Christmas island and Barra strait	11
Clarks Cove, West bay	3
Clarks harbour	17
Cockerwit pass and Woods harbour	20
Cooks cove, Toby cove	4
Calf island bay	5
Crow harbour	3
D'Escousse and Lennox passage	27
Digby and Annapolis, 5 winter buoys.	15
Dover	4
East Dover	3
East bay, Bras d'Or	8
Fourchu harbour	11
French Village, St. Margarets Bay	5
Great Bras d'Or	8
Gillis point, Boulaceet	1
Guysborough	3
Glace bay	4
Hay cove	14
Harbour au Bouche (6 stakes)	4
Ingonish, South bay	7
Isaacs harbour	12
Indian harbour	4
Jeddore	11
Judique	1
Ketch harbour	6
L'Ardoise	5
Lahave	12
Little Narrows	10
Little Dover	9
Little Bras d'Or	2
Liverpool	3
Lockeport	6
Lunenburg	8
Lunenburg, back cove	9
Lunenburg, middle south	16
Louisburg	7
Liscombe	6
Mabou	19
Mahone bay and Chester	12
Main-à-Dieu	6
Margaree harbour	9
Merigomish	6
Marie Joseph	13
Monsellier	10
Jegogin	7
McKinnon harbour	6
Musquodoboit	7
Martins Brook	6
Meteghan river	2
Northport	11
North Sydney	5
Neils harbour	1
Parrsboro'	6
Petit de gras	12
Pictou	6
Pope's harbour	1
Port Félix	11
Port Hood	7
Port Le Tour	15
Port Medway	9
Port Morien	2
Port L'Hebert	12
Pubnico	18
Pugwash	9
Prospect Lower	10
Port Mouton	5
Port Bickerton	5
Pennant harbour	8
Pringle's harbour	4
River John (stakes)	3
Roseway	3
St. Anns	5
St. Mary river	9
St. Mary river, up to Sherbrooke	18
St. Peter's bay	16
St. Peters inlet	10
Sambro	12
Shag harbour	15
Sheet harbour	9
Shelburne	25
Ship harbour	9
Ship rock	1
Shulee	8
Smith's island	1
Sydney	2
Shad bay	3
Sober island to Ecum Secum	21
Spry bay	6
Tangier	4
Tatamagouche 46 stakes and	18
Terrence bay	13
Tor bay	19
Three fathom harbour	5
Tidnish	5
Tusket (two contracts), (3 spindles)	30
Upper Prospect	4
Wallace	15
West bay	3
West Dublin and Crooked channel	13
Westport	3
Weymouth	13
Whitehead	9
Yarmouth	50
Maintained by agency—	
(whistling buoys)	13
(bell-buoys)	35
(steel conical and can-buoys)	190
(gas-buoys)	4
(combined gas and bell-buoys)	5
(combined gas and whistling)	27
(light vessels)	2
Submarine Bell signal stations	3
Submarine Bells attached to gas-buoys.	1
Walton harbour	1

List of Buoys in the Waters of British Columbia.

(Gas-lighted Buoys Excepted.)

Name of Buoy.	Position.	Description.
Arrow lakes	In the Narrows	7 spar buoys.
Fraser river	In the Channels	13 can buoys.
Kootenay lake	At different points	9 platform buoys.
Hesquiat	Fairway harbour entrance	Whistle, steel, black and white vert. stripes.
Half-tide rock	Hecate passage, Clayoquot sound	Platform, ball, red.
North bank	" "	" drum, black.
Vargas rock	" "	" ball, red.
Meares spit	Deception channel "	" black.
Stubbs spit	Stubbs spit "	" "
Browning passage	West end of pass "	Spar, red and black, horizontal bands.
"	North shore bank "	Spar, black.
"	Middle bank "	Spar, red.
Hankin rock	Mosquito harbour "	Platform, red and black, hor. bands.
Round island (north)	Round island bank "	Spar, black.
" (south)	Templar channel bank "	Spar, red.
Templar channel	Village island "	Steel can, drum, black.
Amphitrite point	Carolina channel, Barkley sound	Whistle steel, red.
Sutton rock	Ucluelet harbour "	Platform, red and black, hor. bands.
Rosedale rock	Race rocks, Juan de Fuca strait	Steel can, black.
Whale rock	Esquimalt harbour	Spar, red and black, horizontal bands.
Patterson rock	"	Platform, black.
Canteen	"	Platform, red.
Channel rock	Victoria harbour	Platform, ball, black.
Songhies rock	"	Spar, black.
Hospital rock	"	Platform, ball, black.
Johnstone reef	Haro strait	Steel can, black.
Darcy shoal	"	"
Sidney spit (east)	Sidney channel	"
" (west)	"	Steel conical, red.
Sidney wharf (south)	Shoal, Sidney wharf, V.I.	Spar, red.
" (north)	" "	"
Sidney rock	Rock "	Platform, red.
Colbourne (south)	Colbourne passage	Platform, drum, black.
Colbourne passage (north)	"	Platform, ball, red.
Celia reef	Shute passage	Steel conical, red.
Entrance point (Kelp rock)	Satellite channel	"
Batt rock	Gauges harbour	Steel can, black.
Horda rock	"	Platform, ball, black,
Benmohr rock	Trincomali channel	Platform, ball, red and black hor. bands
Governor rock	"	Platform, ball, black.
Victoria rock	"	Steel can, red and black, hor. bands.
Virago rock	Porlier pass	Spar, black.
Porlier pass fairway	"	Bell. steel, black and white, vertical.
Grappler reef	Houston passage	Steel can, black.
Indian reef	Stuart channel	"
False reef	"	Steel can, red and black hor. bands.
White rock	Trincomali channel	Steel conical, red.
South east	False narrows	Spar, red.
East	"	Spar, black.
Middle	"	Spar, red.
West	"	Spar, black.
Rosenfeld reef	Strait of Georgia	Steel can, cage, black.
Gossip reef	Active pass	Bell. steel, black.
Sandheads	Channel across Sandheads	5 steel conical, black 8 steel conical red.
Point grey fairway	Burrard inlet	Ball. steel, red.
First narrows	South side of Narrows	Spar red.
Burnaby shoal	Vancouver harbour	"
Reef point	Strait of Georgia	"
Welcome point	Welcome pass	"
Tattenham ledge	"	Spar, black.
Snake island reef	Strait of Georgia	Steel conical, red.
Horswell reef	"	"
Clarke rock	Inner channel	Platform, black.
Entrance	Nanaimo harbour	Platform, triangle, black.

List of Buoys in the Waters of British Columbia—*Con.*

Name of Buoy.	Position.	Description.
Gallows point	Nanaimo harbour	Platform, ball, red.
South channel	"	" diamond, black.
Middle bank	"	" ball, red.
South channel (west)	"	" diamond, black.
Satellite reef	"	" ball, red.
Middle bank (south-west)	"	Spar, red.
" (west)	"	"
Carpenter rock	"	Platform, ball, black.
Mill stream	"	" black.
Passage rock	Newcastle island passage	" "
Departure bay reef	Departure bay	" ball, red.
Dorcas rock	Dorcas point, Vancouver island	Spar, black.
Hornby wharf reef	Lambert channel	"
Reef bluff (south)	Baynes sound	Steel conical, triangle, red.
" (west)	"	Steel conical, red.
Village point	"	"
Kelp bar crossing (west)	"	Spar, red.
" " (east)	"	"
Atrevida reef	Malaspina strait	"
North reef	North end, Texada island	Spar, black.
Cortes island reef	Baker passage	Steel conical, red.
Shark spit	Marina island	" "
Whaeton rock	Whaleton bay	Spar, red.
Siwash rock	Johnstone strait	Spar, black.
Ripple reef	"	Steel can, red and black, horizontal bands.
Swan rock	Addenbrooke point, Fitzhugh sound	Spar, black.
Walbran rock	Fisher channel	Steel can, red and black, horizontal bands.
Bloxam bank	Telegraph passage, Skeena	Spar, black.
Centre bank	Skeena river	Steel nun, red.
Hazel point	Middle passage, Skeena	Spar, red.
Fairview reef	Prince Rupert harbour	Steel conical, red.
Tugwell reef	Metlakatla	Spar, black.
Harbour channel (west)	"	Platform, black.
" (east)	"	" "
Sparrowhawk rock	Cunningham passage	Steel can, red and black, horizontal bands.
Hankin reefs	"	Platform, red.
Dodd passage	Port Simpson	Spar, black.
Harbour reefs	"	Steel conical, red.

List of Gas Lighted Bell and Whistling Buoys established in British Columbia, 1908-9.

Name of Buoy.	Position.	Description.
Casey Point	Gas Buoy	Prince Rupert.
Spire Ledge	"	"
Barrett Ledge	"	"
Ellinor Rock	"	Chartham Sound.
Alford Reef	"	"
Hodgson Reef	Gas and Whistle	"
Skidegate Bar	" "	Hecate Straits.
New England Rock	" "	"
Stenhouse Shoal	" "	"
Vancouver Rock	" "	Milbank Sound.
Dall Pach	" "	"
Haddington Reef	Gas and Bell	Broughton Straits.
Comox Bar	" "	Gulf of Georgia.
Sturgeon Bank	Gas, White and Bell	"
Swiftsure Bank	" " "	Off Juan de Fuca Straits.

Buoys in store. May 22, 1909—

2 can buoys, 5 feet diameter.
1 can buoy, 6 feet diameter.
3 can buoys, 5½ feet diameter with tripod.
1 can buoy, 6 feet diameter, with tripod.
1 conical buoy, 3—6 feet, large buoy.
1 conical buoy, 7 feet diameter.
1 nun buoy, 2 feet diameter.
3 conical buoys, 3 feet diameter.
1 whistling buoy (American pattern).
4 8½ combined gas and bell buoys.
3 9½ gas buoys.
2 11 gas buoys. Esquimalt.

Beacons, &c., in store.

2 beacons with tripod complete.
1 bell and whistle tripod.
2 tripods.

HYDROGRAPHIC SURVEY.

The hydrographic survey work is in charge of Mr. W. J. Stewart who has reported upon the work in the various waters, where the hydrographic survey staff has been employed.

Lake Superior survey was conducted in the *Bayfield* under command of Captain F. Anderson. The vessel left Owen Sound on May 10, 1908, proceeded to Nipigon bay on the north shore of Lake Superior and took up the survey work in the eastern approach to the bay and continued there until August 1. From that date the *Bayfield* was employed from Simmons harbour to Isacor Point to obtain a more correct delineation than is shown on existing charts. The work was completed and the vessel proceeded to Owen Sound and was put in winter quarters on November 23. The north shore of Lake Superior from Pigeon river to the eastern entrance of Nipigon bay, with the exception of Nipigon and Black bays, has been accurately and carefully surveyed and charted. Fifty miles between Simmons harbour and Isacor Point, has been traversed and plotted in detail but no sounding has been done in this stretch. On June 23, the *Bayfield* struck a rock and was damaged, repairs costing $5,884.13.

The survey in the Atlantic coast division was performed in the *La Canadienne,* in command of Captain Irving Miles. The vessel left Sorel on May 18, 1908, and continued the survey of the mouth of the Saguenay river and the St. Lawrence river between Red island and Razade islands. A large scale plan of the mouth of the Saguenay river was completed showing accurately the many shoals and banks in the Saguenay. The general work of charting the St. Lawrence river was carried on for the purpose of acquiring greater accuracy of detail for the new charts.

In May, 1908, a small party in charge of Mr. Chas. McGreevy was engaged in surveying Cumberland basin, Nova Scotia, with a view of supplying charts more in detail.

On Lake of the Two Mountains, Ottawa river, the survey party under charge of Mr. A. J. Pinet, resumed operations on May 1, 1908, using the yacht *Josephine*. Fair progress was made, advancing the survey to a stage where completion is expected in 1909.

The Pacific coast survey was continued on April 3, 1908, by a party in charge of Captain P. C. Musgrave, in the southern approach to Prince Rupert harbour and the mouth of Skeena river. On June 10, the new hydrographic steamer *Lillooet* was put in commission under the command of Captain Musgrave and completed a survey in Chatham Sound, east of Lucy and Rachal islands, and from Tree bluff to Island point. An important result of the survey at entrance to Prince Rupert harbour was the finding of a shoal head of eleven feet upon Alexandra patch where it was supposed that a depth of ten fathoms existed.

All of the eastern officers of the survey staff were engaged in the office at Ottawa plotting the season's notes and preparing for charts engraving. The work upon Lake St. Francis charts made some progress.

The charts issued to the public were the following: Lake St. Peter, White island to Orignaux point, Lake St. Louis and Key harbour, Georgian bay.

In connection with the St. Lawrence river charts, the services of Captain J. G. Boulton, retired naval officer of Quebec, were secured to assist the officers in preparing sailing directions for the river between Quebec and Kingston.

The report of Mr. Stewart forms Appendix No. 8 of this report.

DOMINION STEAMERS.

'MINTO.'

The C.G.S. *Minto* is a single screw vessel specially designed for ice-breaking in the Strait of Northumberland.

She was built in Dundee, Scotland, in 1899 and is 225 feet long, 32 feet 8 inches broad, 18 deep, 372 net, 1,090 gross tonnage, and 216 nominal horse-power.

At the beginning of the fiscal year 1908 she was plying between Pictou and Charlottetown in conjunction with the s.s. *Stanley* until April 25, when she was put on the marine slip at Pictou, had her bottom examined and painted and on May 5 came off the slip. Her topsides were then caulked, cleaned and painted, and she left for Quebec on June 23. After fitting out there, she sailed down the Gulf of St. Lawrence, called at St. John, N.B., Mingan and other points, returned to Quebec, went to Montreal and reached Charlottetown on July 28. Here the usual number of her crew were paid off and she remained at the Marine wharf, undergoing general repairs preparatory to the winter service, which she resumed on December 14.

When five miles out of Charlottetown harbour, she sighted the schooner *Jasson* loaded with coal and in distress, went to her relief and towed her into Charlottetown harbour.

The *Minto* remained on the Charlottetown-Pictou route until December 26, when she was transferred to the Georgetown-Pictou route, where, with the exception of delays caused by heavy ice, from January 30 to February 3, and on February 25, from March 23 to 27, made regular trips on this route until the end of the fiscal year.

In the winter service, the *Minto* made 49 round trips, carried 84,469 packages of freight weighing in all 4,468¾ tons; freight earnings were $6,171.99; carried 2,401 passengers; earnings $3,274; provided 1,457 meals to passengers, $206.10, and 487 berths, $487; total earnings, $10,139.09.

STANLEY.

The C.G.S. *Stanley* is a steel single screw ice-breaker, built in Govan, G.B., in 1888. She is 207·8 feet long, 32·00 feet wide, 17·9 feet deep; is 397 net, 914 gross tonnage, 300 nominal horse-power.

She was on the Charlottetown-Pictou route on April 1, 1908, and from that date until the 23rd, continued to make tri-weekly trips there.

Her boilers being then cleaned, she began the buoy service on the second of May and placed buoys at Rifleman Reef, Fitzroy Rock, Cape Bear, Farras Shoal, Jourimain island Shoal, Zephyr Rock and West Point.

Anchoring in the Strait of Northumberland all night, of May 8, on account of dense fog, her anchor fouled the Anglo-American telegraph cable and so injured it as to interrupt telegraphic communication between the Island and the mainland. Completing the buoy service on May 13, she was sent, on the 15th, to help repair the damage done the cable. It was raised and spliced, after which the *Stanley* returned to Charlottetown on May 17. The following day, she sailed for Pictou where she was put on the marine slip. Returning to Charlottetown on June 17, she was caulked, cleaned and painted, left for Pictou for bunker coal and sailed for Quebec on July 14 to take part, with other departmental steamers, in the Tercentenary celebration and returned to Charlottetown and Pictou on August 3 to undergo general repairs for the approaching winter service; made necessary preparations and sailed to Summerside to carry freight and passengers when the Steam Navigation Company's steamers stopped. She made return trips daily, between Summerside and Pointe du Chene till the 21st, when she was put on the Charlottetown-Pictou route, remaining there till the 25th, and then went on the Georgetown-Pictou route where she was plying at the end of the fiscal year.

During the winter service, the *Stanley* made 50 round trips, carried 93,002 packages of freight weighing in all 1,620·81 tons; 2,223 passengers; provided 1,495 meals, and 589 berths.

Her earnings were:—

For freight	$6,443 97
For carrying passengers	2,884 00
For meals	263 50
For berths	589 00
Total earnings	$10,180 47

BRANT.

The crew joined the *Brant* at Charlottetown on April 13, 1908. She was thoroughly fitted out, scraped, caulked, cleaned and painted. She then towed the tug *Prince Edward* to Crapaud and placed a conical buoy on Brackley Point reef. She then placed the Charlottetown harbour buoys. Arrangements were made on May 6 with the

Prince Edward Island Tug Company to charter the *Brant* for passenger and freight service and she remained in their employ until June 5. From that date to August 26, she was engaged conveying coal to East Point fog alarm and supplies to light-stations. She was engaged in wharf inspection until September the 22nd, and in the light-house and buoy service until the close of navigation. Her crew was paid off on September 30.

Receipts—

From Department of Public Works	$ 35 00
" Prince Edward Island Tug Company	450 00
" Buoy contractor, Foster	80 00
Total receipts	$565 00

LANSDOWNE.

The *Lansdowne* is a wooden steamer 188 feet long, 32 feet wide, 15 feet deep, and 680 gross tonnage. She is employed in the lighthouse and buoy service of the New Brunswick agency of this department.

On April 1, she was employed in delivering supplies to lighthouses under the superintendent of lights. On the 8th, she succeeded, after considerable difficulty, in landing building material at Machias. The vessel was then employed in placing gas buoys until April 16, and after that date supplied coal to the lightship *Lurcher* and to fog-alarm stations. On May 6, the *Lansdowne* was put on Hilyard's blocks, part of the stem, cut-water, main keel, false keel, and planking were renewed, caulking and painting done, all at a cost of about $2,000.

During the month of June and part of July, the vessel was employed in delivering supplies for the maintenance of lights, raising and placing gas and other buoys; and on July 16, left St. John with supplies for lighthouses along the northwestern shore of the Bay of Fundy, in charge of her first officer. She returned to St. John on July 27; on August 1, resumed the delivering of coal, oil and other supplies to, practically the same light stations in the Bay of Fundy. During the months of September and October she attended to the buoy service in the Bay of Fundy and landed supplies.

The month of November was stormy and the *Lansdowne* had much difficulty in locating buoys which had drifted from their position and in supplying the lightships.

On her return to St. John, she was placed on Hilyard's blocks for repairs which cost about $500. These being completed on December 16, the steamer was employed for the balance of the month in the buoy service.

On January 1, 1909, the vessel was at Yarmouth, N.S., and from there proceeded to some gas buoys, the lights of which were extinguished, relit them and went to the assistance of the *Lurcher* lightship which had left her moorings. The *Lurcher,* however, did not require assistance; the *Lansdowne* then proceeded to St. John to recover the Partridge Island bell boat. After this, the steamer endeavoured to recover some of the gas buoys which had drifted in the storm; the steamer arrived at Yarmouth on February 10. From that date she was engaged, until March 10, in replacing and recharging gas buoys, which was accomplished with great difficulty, owing to severe

storms and unfavourable weather. Some large automatic and gas buoys were recovered and replaced; and the balance of the month was occupied in saving some valuable buoys which had been injured and had drifted from their moorings.

'QUADRA.'

The *Quadra* is an iron steamer, 174 feet long, 31 feet beam, 13 feet 6 inches deep and 573 gross tonnage. She is employed in the British Columbia agency of this department. She was repaired and went into commission on the 13th of April. During the rest of the month she was employed in transporting materials for Pachena wireless telegraph station and in delivering stores to the west coast stations. The *Quadra* was in the buoy service in May and moved the automatic beacon from Green Top island to Holland Rock. From the 1st of June to the 15th of September she was employed in the lighthouse and buoy service, and from the latter date to the 30th of September was on a tour of inspection in the northern waters of the province, after which she recharged buoys and beacons with carbide.

The *Quadra* was then put on the slip of the Victoria Machinery Company, where she was cleaned and painted, and during the rest of the fiscal year was employed in lighthouse and buoy service.

WILLIAM JOLIFFE.

This vessel was chartered to assist the *Quadra* in replacing buoys that had been moved from their moorings by winter storms. Her services were dispensed with on the 27th of April, 1908, but she was again chartered for buoy service from the 12th to the 27th of October.

LEEBRO.

The *Leebro* was employed in coaling fog alarm stations and transporting fog alarm machinery to Pachena and Estevan stations, B.C. She then delivered coal to the gulf stations and oil, in the general lighthouse service, up to the 30th of September. From the 1st of October the *Leebro* was employed in the west coast telegraph service and the removal of workmen. In November she was engaged in the transportation of lighthouse supplies and in the recovery of the Swiftsure Bank gas buoy until the 9th, when her services were dispensed with.

CASCADE.

This vessel was chartered on the 20th of April, 1908, and was employed in the buoy service until the 25th, and conveyed men and supplies for the west coast trail until the 7th May. She resumed the lighthouse and buoy service until the 4th of July, when her services were dispensed with.

MONTCALM.

The *Montcalm* is a steel twin screw vessel, 245 feet long, 40·6 feet wide, 15·7 feet deep; 526 net, 1,432 gross tonnage, 406 nominal and 4,250 indicated horse-power at a steam pressure of 220 pounds.

This powerful icebreaker was built at Yoker, G.B., in 1904, for the St. Lawrence winter service, for which purpose she has proved very effective.

During the season of navigation, she was employed in the delivering of supplies to lighthouses and in carrying material for and workmen employed at the construc-

tion of lighthouses and fog-alarms in the Gulf of St. Lawrence and Straits of Belle Isle.

In the spring she rendered assistance in the ice to vessels employed in the St. Lawrence trade, and in winter in breaking the ice-bridge at Cap Rouge.

Returning from her cruise in Cabot strait, and while rendering assistance through the ice to incoming vessels, she was struck, in Quebec harbour, by the *Milwaukee,* of the Canadian Pacific steamship line, about 9.30 p.m. of the 7th of May. She sank at Pointe-a-Carcy wharf during the night, was floated on the 16th, taken to the graving dock for repairs and was put in commission on the 30th of June. The repairs, made by George T. Davis & Son and the staff of the Quebec agency, cost about $33,000.

From the 1st of July to the 1st of October she was in the light and buoy service in the Gulf of St. Lawrence and Straits of Belle Isle, and on her way back from a 'supply' trip brought back Marconi operators from Whistle Rock and Heath Point, the workmen from the Straits of Belle Isle and landed the crew of the wrecked schooner *Blanche Alma* at Father Point.

The *Montcalm* sailed for Seven Islands on the 28th of December and found half the bay covered with ice; she broke through ice ten inches thick for two and one half miles to Clarke City wharf then returned to Quebec on the 31st.

On January 12, 1909, the *Montcalm* began cutting the icebridge which had formed at Cap Rouge. This accumulation of ice was from fifteen to forty feet thick in some places. A channel 1,200 feet wide was made; and as the ice was loosened it floated down the river. The work was continued until the middle of April and the channel kept open as far as Quebec. The steamer's operations, not only opened navigation about three weeks earlier than it naturally would open, but also prevented the usual flooding of certain places along the banks of the river. By continued efforts, she was able to reach Lake St. Peter on April 19. Representatives of the Quebec legislature, the boards of trade of Quebec and Lévis, and of Laval University, were, on three occasions, on board the steamer and witnessed with satisfaction, her icebreaking operations.

The opening of the channel and the steady removal of the icebridge proved the utility of the undertaking and the fitness of the *Montcalm* for that particular kind of icebreaking.

DRUID.

The *Druid* is a single screw steel vessel of 59 nominal horse-power; 160 feet long, 30 feet beam, 12 feet 5 inches deep; 149 net and 503 gross tonnage.

With one interruption, this vessel was employed in the lighthouse and buoy service from Portneuf to Father Point, a distance of 185 miles, under the control of the Quebec agency of the Department of Marine and Fisheries. In this service, she placed, kept in position and raised the gas buoys, maintained the beacons, towed the three lightships to and from their stations, carried workmen, coal and supplies.

In December, she made a special trip to Ste. Anne-des-Monts with provisions, the schooner *Marie Blanche* with provisions for that place having, previously, been wrecked.

ARCTIC.

The *Arctic* is a single screw, wooden steamer built in Keil, Germany, in 1901 and bought by this department in 1904. She is 161·4 feet long, 37·2 feet wide and 20·2 feet deep, is 518 net, 762 gross tonnage and 44 nominal horse-power.

In command of Captain Bernier, she left Quebec about July 25, 1908, with full provisions, outfit and crew for a two-years' cruise in the Arctic waters.

ABERDEEN.

The *Aberdeen* is a single screw steel vessel built in Paisley, Scotland, in 1894. She is 180 feet long, 31·1 feet wide, 16·9 feet deep; is 266 net, 674 gross tonnage and 200 nominal horse-power. She is in the lighthouse and buoy service of the Halifax agency of this department.

The *Aberdeen* loaded machinery and building materials at Halifax for Clark's Harbour and Cape Fourchu. From April 22 she was engaged in the buoy service, returned to Halifax and was employed in that harbour buoy service until the 28th. She then loaded machinery for Clark's Harbour and on the 30th, landed carbide and explosives at Sambro and returned to Halifax. The *Aberdeen* left Halifax on May 1, landed machinery and materials at Clark's Harbour, buoys and machinery at Yarmouth; was employed in the buoy service for some time and sailed for St. John, N.B., for lighthouse supplies where she remained until the 6th. She left with supplies for lighthouses and fog alarms. From the 12th to the 30th she supplied the *Lurcher* with coal and oil and attended to lights and buoys until August 16. From that date until the 24th she was laid up for repairs at Halifax and resumed the lighthouse and buoy service till September 19, when she was ordered to go into quarantine, remaining there four days.

She resumed her usual lighthouse and buoy service in Nova Scotia until November 26, when she began picking up buoys in Prince Edward Island waters. The *Aberdeen* left Souris, P.E.I., for the Magdalen Islands on December 3, raised the buoys there and returned to Nova Scotia waters where she operated until the end of the fiscal year.

'LADY LAURIER.'

The *Lady Laurier* is a twin screw, steel vessel, 214·9 feet long, 34·2 feet wide, 17·2 feet deep; 413 net, 1,051 gross tonnage and 186 nominal horse power. She was built at Paisley, Scotland, in 1902, and is employed in the lighthouse and buoy service of this department in Nova Scotia.

The *Lady Laurier* had a very successful year in the service. No casualty has been reported. She was in quarantine at Lawler Island from the 1st to the 5th of April, and from that date to June 16, was constantly employed in the lighthouse and buoy service. On the 22nd, she landed materials for the dog-fish reduction plant at Clarke's Harbour and during the month of August, delivered supplies at East Cranberry Island, Sable Island, Cape Race, Newfoundland and other stations along the coast of Nova Scotia, and on September 1, sailed to Sable Island, took 49 ponies on board and sailed for Halifax.

She attended the work at Cape Fourchu submarine bells, searched for the South West Ledge buoy which went adrift and after much difficulty, caused by unfavourable weather, placed it in position, on September 30.

The *Lady Laurier* supplied lighthouses between Halifax and Cape Sable during the month of October, returned to Halifax where her bottom was scraped and the ship repaired, cleaned and painted and on December 1, resumed the buoy service, ending the year's operations by taking boilers from Halifax to Cape Ray.

CONSTANCE.

The *Constance* is a composite single screw steamer 115·6 feet long, 19·6 feet wide, 11·2 feet deep; 126 net, 185 gross tonnage and 50 nominal horse-power. She was built at Owen Sound by the Polson Iron Works in 1891.

She was transferred from the Customs service to the Fisheries Protection service.

'EUREKA.'

The *Eureka* is a steel, single screw vessel, 94·7 feet long, 22 feet wide, 11·9 feet deep; 170 gross, 91 net registered tonnage and 40 horse-power. She was built in Glasgow, Scotland, in 1893, for the Department of Public Works, is now in the pilot service of this department, and commanded by Captain F. X. Pouliot.

While wintering in the Louise Basin, Quebec, alterations and repairs were made preparatory to the approaching season's operations.

'SIMCOE.'

The *Simcoe* is a steel, twin screw vessel of 217 horse-power. She was built by Swan, Hunter and Wingham Richardson, Limited, Wallsend-on-Tyne, England, and launched in 1909, is 180 feet long, 35·2 feet wide, 15·2 deep; 913·8 gross, 437·63 net tonnage

The *Simcoe* is completed and will sail from Great Britain to take up the light-house service above Montreal and the buoy service in the Georgian bay.

'LILLOOET.'

The *Lillooet* is a twin screw steel steamer, 170 feet long, 27 beam, 15 feet deep, and has a displacement of 760 tons with 800 indicated horse-power. She is employed in the hydrographic survey in British Columbia and was built and equipped with the latest surveying devices for this service.

'BAYFIELD.'

The *Bayfield* is a steel screw vessel built at Meadowside, Patrick, G.B., in 1889. She is 140 feet long, 24·1 feet wide, 11·3 feet deep; 86 net, 276 gross tonnage and 160 horse-power.

She was engaged in the hydrographic survey in Lake Superior during the season of 1908. She left Owen Sound on May 10, and returned on November 23, 1908.

'GULNARE.'

The *Gulnare* is a screw steel vessel, 137 feet long, 20·5 feet wide, 13·6 feet deep; 106 net, 262 gross tonnage and of 64 horse-power. She was built at Scotstoun, Glasgow, Scotland, in 1893, and is employed in the tidal survey service of this department.

During the season of 1908, she was employed in the Strait of Northumberland.

SHAMROCK.

The *Shamrock* is a single screw wooden vessel, built in Quebec in 1898. She is 117·3 feet long, 25 feet wide and 9·7 feet deep, 161 net, 237 gross tonnage and 61 nominal horse-power. She is employed in the lighthouse and buoy service of the Montreal agency of this department.

SCOUT.

The *Scout* is a wooden, single screw vessel of 27 nominal horse power, built in Cardinal, Ontario, in 1900. She is 103·6 feet long, 25·6 feet wide, 9·2 feet deep, 70 net and 176 gross tonage. She is fitted with powerful search and electric lights and was used in the buoy service between Montreal and Kingston during the fiscal year.

LAMBTON.

The Lambton is a steel, single screw vessel of 89 horsepower, built at the government shipyards Sorel, P.Q., in 1908-9. She is 108 feet long, 25·1 feet wide, 12·7 feet deep; 323 gross and 182 net tonnage.

Her engines are triple expansion, inverted, direct acting, with working pressure of 170 lbs. to the square inch, and built by Flemming and Ferguson, Limited, Paisley, Scotland.

She is intended for the lighthouse construction and superintendence service of this department.

RESERVE.

The *Reserve* is a screw, wooden vessel, built in Buffalo, N.Y., in 1884. She is 61·8 feet long, 15·3 feet wide, 4·8 feet deep; 36 net, 49 gross tonnage and 30 horsepower. She is engaged in sweeping the channel, towing and attending the buoys under the control of the lighthouse depot, Prescott.

LA CANADIENNE.

The *La Canadienne* is a single screw iron vessel, built in Glasgow, Scotland, in 1880. She is 154·3 feet long, 22·7 wide, 10·9 deep; 227 net, 372 gross tonnage, and of 60 horse-power.

She was employed during the season of 1908 in the hydrographic survey in the St. Lawrence river.

LADY GREY.

The *Lady Grey* is a twin screw, steel vessel, built at Barrow, G.B., in 1906. She is 172 feet long, 32·2 feet wide, 15·9 deep; 65 net, 733 gross tonnage and of 353 nominal horse-power. She is fitted with sweeping apparatus for ship channel work and two 12-inch salvage pumps, each of which has a capacity of 2,500 gallons per minute.

Her powerful engines, twin screws and other equipment, render this steamer very useful for icebreaking, towing, sweeping and wrecking purposes. She was employed during the season of 1908 in the ship channel service.

ROUVILLE.

The *Rouville* is in the construction of lights service in the lower St. Lawrence river.

The fisheries cruisers are:—The *Canada,* the *Petrel, Curlew, Ostrea* and *Constance* in the waters of the maritime provinces; *Kestrel, Falcon, Georgia* in the waters of British Columbia; *Viligant* in Ontario waters; *Princess* in Quebec waters.

LIGHTSHIPS.

THE LURCHER LIGHTSHIP.

The *Lurcher* lightship is 121 feet 3 inches long, 24 feet 7 inches wide, 19 feet deep; 269 net and 396 gross tonnage. Her station is near the Lurcher shoal, Bay of Fundy. The vessel is fitted with boilers and engine to enable her to steam to port in the event of dragging her anchor or breaking from her moorings in a storm. This lightship was on the station from the 1st of April until the 6th of January, 1909, when she lost her moorings in a heavy storm, but was replaced on the 9th of the same month. The *Lurcher* was taken from her station on 24th January and replaced by the *Anticosti.* In the meantime extensive repairs are being made to the *Lurcher.*

THE ANTICOSTI LIGHTSHIP.

The *Anticosti* is 121 feet 3 inches long, 24·7 feet wide, 19 feet deep; 269 net and 396 gross tonnage.

The *Anticosti* is stationed off Anticosti island in the gulf of St. Lawrence. This lightship was placed upon her station in the spring and remained there until November. It was decided to place the *Anticosti* on the station of the *Lurcher* lightship in the Bay of Fundy. On the way to that station the *Anticosti* struck the ledges off Canso while in charge of a pilot, and was injured to such an extent that it was necessary to take her to Halifax, where repairs were made to the hull. Upon completion of these repairs the *Anticosti* proceeded to Yarmouth and from there to the Lurcher station, where the vessel was moored on the 24th January, 1909, and remained there until the 18th of February. In a heavy gale the *Anticosti* broke from her moorings, but was replaced on the 22nd of February. She remained on the Lurcher station until the end of the fiscal year, and was finally replaced by *Lurcher* lightship.

The Prince shoal, Red island and White island lightships are under the Quebec agency and are kept in position under contract by keepers who receive the sum of $3,000 for the season for providing and maintaining crews. Fuel, light and engine supplies are furnished and repairs made by the department. A small light boat is maintained on the Restigouche river under the Quebec agency.

The Miramichi lightship is in charge of a light-keeper under the control of the New Brunswick agency. This vessel was placed in position and taken back to winter quarters by the harbour master at Chatham.

The Barrington lightship is maintained in Barrington east bay, Nova Scotia.

The Sand Heads, British Columbia light broke from her moorings and drifted on the Sand Heads. She was assisted off and repaired.

The three lightships maintained on Lake St. Louis above Montreal were overhauled, placed in position and taken back to Lachine to winter quarters at the close of navigation. The Lake St. Peter lightship was painted and the usual repairs made before being put in position and wintered at Sorel.

ICE FORMATION IN THE ST. LAWRENCE RIVER AND STRAIT OF NORTHUMBERLAND.

An investigation of the conditions governing the formation and disintegration of river ice in the St. Lawrence river and salt water ice in the Strait of Northumberland, on a large scale, was undertaken by H. F. Barnes, D.Sc., F.R.S.C., F.R. Met. Soc., Macdonald professor of Physics, McGill University, during the months of January, February, March and part of April, 1909. Professor Barnes was assisted by Mr. Jas. B. Woodyatt, B.Sc. Two months were spent on board the *Stanley* in the Strait of Northumberland and two months in the *Montcalm,* on the St. Lawrence river at Cap Rouge and above.

A report of the icebreaking observations has been received from Prof. Barnes which contains detailed information of each day's observations. The space in this report will not allow of the reproduction of Prof. Barnes' report in full, but the subject being one of great interest considerable space is here given to extracts.

'Through the kind assistance of the Department of Marine and Fisheries of Canada it has been possible for the writer to extend his studies of natural ice phenomena to include an investigation of the conditions governing the formation and disintegration of river ice on a large scale. It is a pleasure here to record great indebtedness to the minister, Hon. L. P. Brodeur, and to the deputy minister, G. J. Desbarats, for their unfailing interest in the work and their ready help on all occasions. An assistant was provided, Mr. Jas. B. Woodyatt, B.Sc., who devoted four months to the study; and it is a pleasure to mention his faithfulness and industry in collecting the observations under the writer's direction. Two months were spent on board the Canadian government icebreaker *Stanley* doing duty in the Northumberland straits, and two months were spent on the icebreaker *Montcalm,* which did such excellent work this year at Quebec. In this way the ice conditions were studied in two widely different localities. The one dealing with salt water ice where the problem is one of continually changing conditions, shifting with wind and tide, while the other dealt with the immense accumulation of ice at Cap Rouge and above, representing by its solidity the very opposite.

'From the point of view of possible winter navigation of the St. Lawrence, a study such as the present, is of the greatest importance. Information must be obtained by those skilled in scientific observation before anything very definite can be stated as to the feasibility of winter navigation. The present investigation, while not overlooking this point was undertaken primarily for scientific investigation. The result of this study shows where improvements can be made in order to lengthen the navigable season as far as the port of Montreal. This was partially demonstrated this year by the performance of the C.G.S. *Montcalm.* In treating the ice problem even those with the oldest experience are inclined to regard the task of ice breaking from the wrong end. Any one who views the ice accumulation in the river towards the end of the winter thinks rightly of the impossibility of coping with such masses. Where ice is prevented from accumulating, and usually the task of prevention is not an insurmountable one, these large masses cannot form. It is the work of but a few days or less for the formation of the famous ice bridge at Cap Rouge and yet it is the work of two months to break it down again, whereas the presence of an ice breaker during the first few days and after would prevent the bridge from forming altogether and make the task of keeping the river clear at that point, a simple one.'

WORK AT THE NORTHUMBERLAND STRAITS.

'Observations on the formation and action of salt water ice are of great interest. It is quite unlike fresh water ice, being so very variable in composition and different in appearance.

'Prof. Otto Pettersson of Stockholm, President of the International Commission for the study of the sea, has made an extended study of salt water ice. As a result of his inquiry he finds that ocean water is divided on freezing, not into pure ice and a more or less concentrated solution of ordinary sea salt, but into two saliniferous parts, one liquid and one solid, which are of different chemical composition. It is found that the formation of sea ice is chemically a selective process. Some of the elements of the salt water are more fit than others to enter into the solid state by freezing; those that are rejected by the ice will preponderate in the brine, and vice versa. As a rule the ice is richer in sulphate, the brine in chlorides. With time the ice appears to give up more and more of its chlorides and to retain its sulphates. The general opinion has been that pure ice was formed at the freezing of sea water. The small impurities always present in sea ice were accounted for by adherent sea water, but it has been conclusively shown that the freezing of sea water involves a separation of its chemical constituents of which one part enters into the composition of the solid another into that of the liquid water. The actual salinity of the ice is of course small and was found to diminish with the age of the ice. Immediately after its formation sea ice contains a noticeable quantity of salt, chlorides as well as sulphates, carbonates and other salts. Such ice is very different from fresh water ice in its physical properties. It melts below zero, and begins to show signs of melting by contraction of volume at temperatures far below zero. Thus ice which contained as much chlorine as 2·73 parts per thousand commenced to contract at 14°C. (6·8° F.) and continued to do so up to the melting point. Ice formed by freezing at low temperatures of arctic sea water which contained 3:49 parts per thousand of chlorine began to contract in volume at 18° C. (o° F.) This phenomenon is, however, a relative one so far as any ice is concerned. Even fresh water ice contains small traces of impurities which cause a contraction of volume before the actual melting occurs. The purer the ice the sharper is the change from solid to liquid differentiated. E. V. Drygalski has found in his study of polar ice for the Berlin Geographical Society that the salinity of newly formed sea ice is from four to five parts of salt per thousand. He found what is very important, that the salt is not confined to the uppermost layer of the ice. The salt was found to be almost equally distributed in every layer of the sea ice from the surface to 68·4 cms. depth, where the salinity was four parts per thousand. But after two months the salinity in all layers decreased from four or five parts per thousand to one or two parts per thousand.

'A very interesting characteristic of the thin layers of salt water ice is their great mobility. It is entirely different in appearance to fresh water ice being white and the top layers seemingly full of mechanically suspended salt. Extreme brittleness which characterizes the fresh water ice is entirely wanting. A small wave set up in the water travels through it without breaking it, the thin layers rising and falling and exhibiting great plasticity.

'The observations made by Mr. Woodyatt were accurate temperatures of the water and air, the humidity, barometric pressure and the determination of the strength of the various forms of ice met with in the straits. A close watch was kept of any relation between air and water temperature and the effect of other meteorological conditions including the tides on the ice conditions. It was clear that the chief factors in the ice conditions in the straits were wind and tide. The temperature of the water remained very constant everywhere at 30° C. The severity of the air temperature had an influence on the quantity of ice formed, but the greatest difficulties in ice breaking were always experienced in the milder weather especially after a period of great cold. The intense frost appeared to hold the ice which was afterwards let free to be carried from immense distances by wind and tide.'

Mr. Woodyatt's notes to Prof. Barnes, of his observations on board the *Stanley* during each trip made between Georgetown and Pictou from December 31, 1908, to February 20, 1909, contain information respecting the ice conditions and the manner

in which the *Stanley* behaved in the various formations of ice. The temperature, tides, winds, snow storms and rain all had their effect upon the progress of the steamer. On some trips the natural forces greatly retarded the progress of the steamer, in other cases the *Stanley* made her way across the strait with surprising ease. The following quotations taken from the notes of Mr. Woodyatt will serve to show the nature of the ice and afford a pretty accurate conception of the work which this fine little steamer has been engaged in during the winter season since 1888:—

'December 31, 1908.—We made the passage without much trouble, but struck several large pieces of "pan" ice. ("Pan" ice is the name given to the large rafts of hard firm surface ice which drift about with the wind). There was a clear sea along the southeast of Prince Edward Island and in Georgetown harbour.'

'Saturday, January 2, 1909.—Left Georgetown 7.00. Arrived Pictou 10.30. Sun very bright with practically no breeze. We struck hard ice south of Pictou island, and were delayed about 20 minutes getting through one big "pan." The boat could not split this, but had to pound through it. Sometimes the boat almost came to a standstill. All this ice had come down by the tide, as the *Minto,* which passed the same spot an hour before, reported no ice worth speaking of. The ice was about one foot thick, but very hard, owing to the low temperature. The shoving of the wind and tide piles the ice up in even layers, making a very solid mass.'

'Friday, January 15.—The partially formed ice came down with the tide this morning, and although we struck very little ice with any solidity, we ran through this slushy formation (known as "lolly") most of the trip. It forms in flat disks of varying diameters from 3 or 4 inches up to as many feet. These are about ½ inch thick. The space between the disks is filled with slush. In some cases the slush has cemented them together, but a very slight movement of the water breaks them apart. The continual movement of the water piles these disks on top of each other, and joins others on, always increasing the size of the pan, and this process forms what the captain and others describe as bad ice, but at present it has practically no effect on the speed of the ship. At first there appears a sort of thin slush on the surface. Its appearance resembles oil on water when some distance away. It has a surface tension, however, as shown from the fact that the sea from the ship does not break it up as it does the solid ice. This slush forms into little disks about 4 inches in diameter, which gradually grow in diameter. These disks have no power of cohesion, and the wind and movements of the water push them all around until several are piled half on top of each other, making pieces about 2 feet in diameter, the intervening spaces between them being filled with the slush. The water lapping up against these deposits the slush along the sides, making little ridges on top and along the borders. With these slushy edges the little clumpets seem to cohere, and as they are continually on the move, more and more pieces come together and stick, but a small wave will pull them apart or slide them on top of each other. The intervening slush hardens and cements the surface, giving the ice a chance to grow, which it apparently does very rapidly once this stage is reached. The tide is very strong in the strait and the ice is moved about continually, which keeps the cakes broken up into small areas, which it is no trouble to the boat to split, acting as a wedge.

'Tuesday, January 19.—The wind was very cold to-day, and though most of the trip was through open waters, we had to break through several large pans. The ice was clearer and more brittle. It appears to be of the lightest green in colour, and cleaves perpendicularly to the surface. This ice is evidently not joined in the method described before, as it is more glassy and less powdery, but it is the result of very cold weather on still water. We got jammed twice in "pans" of hard ice, there was apparently no give at all; the ship pushed in and forced the ice down, but gradually lost headway and stopped. A second trial after going astern a hundred yards

or so was all that was necessary in each case. This was the first real ice crushing that has been done so far. The pans were large enough to resist splitting, that is, the ship could not start a crack that would extend to the border and thus divide the pan, so the boat had to crowd through. The stern tanks were filled, lowering the stern deck below the wave set by the wheel, the bow thus elevated rode up into the ice and cracked it. It would crack off a piece on either side about twenty feet back. The edge of this piece in this position took up much less horizontal space, leaving an amount of open water for the boat to float on, while the main body of the pan remained intact. This and the splitting are the only two natural ways of the ships obtaining a free surface of water. After the ship passes the pieces right themselves, and 50 yards astern the path is completely blocked. Once we ran far enough in to be squeezed so tight that it took some little time to loosen.'

'Monday, January 25.—The winds of the last couple of days had jammed the ice in betweeen Pictou island and Pictou harbour, and yesterday's cold weather cemented it. We ran about two miles out of the harbour and then came up solid. The ice was piled high, big cakes on top of each other, and these were impassable. There were large pans of ice of diameters varying from a few feet to a quarter of a mile; these were flat, but at their edges where they had been grinding each other big pieces were broken off and turned up, giving the pack the appearance of a lot of fields divided by rough fences. The pans themselves, though sometimes two and three feet thick, were not so hard to negotiate, but the barriers, consisting of ice "rafted" high above water, and very deep below, were simply impossible. The air was very cold and the ice brittle, but it was too solidly jammed by the rising tide for a crack to extend very far. The tide on the rise was making the ice run and carrying us with the ice. The ice at the edge of the fields could be seen "rafting" over and under the surface and piling up, the process being accompanied by very loud groans and the movement and sounds causing a very weird effect. Sometimes the ship would get caught in between two of the fields, then the ice would pile up against the side and jam her so that she could not move either ahead or astern until the ice shifted again. Finally the fires were burned down to wait for the tide to change. Until 1.00 this rafting and groaning kept on, and the ship wedged tightly in the packed ice was moved around it. At 1.00 the tide commenced to ebb, and then, as if by magic, big stretches of clear water opened out of the solid ice, and by skilfully taking advantage of these leads we rounded Pictou island and were past the worst part.'

'The wonderful effect of the tide upon the ice was the most interesting part of the day's experiences. It was hard to believe, after observing the ship make so little effect on the ice, to see the ice suddenly and silently disappear from sight, and disclose big stretches of clear water. The tide runs very fast at this point and the ice is carried three or four hundred yards in a very short time. The silent disappearance or rather opening up of the ice with the tide in the ebb stands out in contrast with the roaring and jostling of the ice when the tide is coming in. We arrived in Georgetown at 4.20, making the longest run of the season.'

'Wednesday, January 27.—The snowstorm ceased, and the day became clear. The wind was still strong from northwest, which was very unfavourable for us. We got under way on the beginning of a favourable tide. A favourable tide is one which tries to drive the ice against the wind, the result being a loosening of the pack. The *Stanley* did splendid work. Through 8 inches of hard, clear pan ice, she could make from four to five miles an hour. This ice was turned under to make way. In the softer lolly, there was more trouble. Great areas of lolly would cling to the sides and greatly impede progress. Sometimes as much as two feet of the ice on her side would be coming along with us. This clinging is not as if the lolly were frozen to the sides, but is more like the adhesion of packing snow. The snow that had fallen made the going bad, especially in the looser parts, where the water had washed it and turned it into slush. In the afternoon we were fighting westward about two miles north of Pictou island, trying to make the east end of it. We struck a big pan of ice extend-

ing right up to the Island shore. This ice was about 10 inches thick. After driving through it for a quarter of a mile, we started a crack that ran ahead as far as could be seen (three-quarters of a mile at least).'

'Thursday, January 28.—The ice was clear and hard, but as before the ship made far better progress in the clear hard pans than in the broken lolly-covered debris.'

'Friday, January 29.—The *Stanley* has never done better work. With no open water in sight she battered along, through pans, barriers, and lolly, backing, turning and manoeuvring, but always getting on. She turned down three feet of solid, hard ice from the big pans and went rapidly through anything under a foot at a good five miles an hour. We were smashing through an 18-inch pan (extending for about two miles) when the tide started to move the ice. The pan we were in came together and nipped us, so that we could not move an inch either ahead or astern. This jamming is wonderful. The ice lifts the ship and presses until you can feel the plates springing.'

'Wednesday, February 3, 1909.—The ice was rafted up and grounded at the sides making a solid mass. It was all made up of broken pieces, turned and thrown into every position and cemented together. It thus had no lines of cleavage, and there was no splitting it. It just had to be knocked away, and ground up little by little, until finally a path was knocked through it, and the ship passed. Once past this barrier we found the ice opened up in a most unaccountable way. The ice was very heavy and covered with snow, making it very hard to get through, but the fields had been so divided by the strong flood tides that we had no trouble at all, following the leads, until we struck the open water off Cape Bear, when it was clear sailing into Georgetown where we arrived at 12.30.'

In the summing up of the notes of observations in the Strait of Northumberland, Prof. Barnes furnishes some valuable information upon the coming together and parting of the ice, the effect of higher and lower temperature upon the movements of the ice and the cause of the formation of lolly which accompanies hard ice. Some thermograph records are given and the effects of sudden changes in the weather are described. He states that, 'The ice troubles experienced by the *Stanley* were found to invariably occur on days of higher temperature following a period of colder weather. Prolonged cold weather had little or no influence when compared to the effect of a rise of temperature. This is what might be expected, for it is during the cold weather that the ice is formed, extending out from the shores and remaining securely frozen so long as the temperature is low. When, however, mild weather followed, this ice became loosened and was carried about by wind and tide. Prolonged mild weather cleared away the ice by rotting and melting it until no ice was found. The lolly which is an accompaniment of the hard ice is formed by spray and wind agitation on the surface in the proximity of the large fields of ice when the presence of the ice keeps the water at or near the freezing point. During very cold weather with no sun the lolly is formed everywhere on the surface and mixed with snow, is blown together in large masses. From the thermograph records obtained by Mr. Woodyatt, it is found that after the mild weather of January 10, 11 and 12, when the temperature was almost entirely above the freezing point, the colder weather of January 13 and 14, found no ice at all in the straits. On the 14th, a sudden rise of temperature from a minimum of 15° F. the day previous to 42° F. brought out masses of lolly and field ice. A second cold dip to 0° F. on the 17th followed by a rise to 43° F. on the 18th produced large pans of ice on the 19th when the temperature fell again. Cold weather with a strong wind from the north on the 19th made the 'pan' ice very brittle and difficult to split and produced lolly in such quantities as to stop the ship entirely on

the 20th during a rise of temperature to the freezing point. The north wind is always accompanied by great dryness which produces a marked influence on the strength of the ice. Open water was experienced on January 23, although the temperature was 10° F. owing to the effect of two days of mild weather, when the temperature reached as high as 48° F. on the 22nd. Increasing cold weather followed from the 23rd to the 25th, but no trouble was experienced until milder weather which commenced at noon on the 25th and remained just below freezing until February 6. During this time a small rise and fall in temperature formed and again loosened the ice until the conditions became so bad, accompanied by adverse wind and tides, that the *Stanley* was very irregular in the trips. On February 8, after two days of mild weather above freezing no ice was found in the straits. A cold dip on the 8th, 9th and 10th followed by a rapid rise at noon on the 10th caused much trouble. Very mild weather on the 11th found no ice at all. On February 17, a rapid rise of temperature after cold weather caused a great deal of trouble again from masses of lolly so great as to stop the ship. On February 20, mild weather following a cold dip again caused much trouble from lolly.'

ICE-BREAKING IN THE ST. LAWRENCE RIVER.

The work of the *Montcalm* at what is termed the ice bridge at Cap Rouge in the St. Lawrence river, is described in the report of Prof. Barnes. Mr. Woodyatt, his assistant, began his observations on February 20. The steamer commenced at the ice bridge on January 12, and up to February 26, had made considerable headway in the heavy ice which had accumulated at Cap Rouge. A few extracts from notes of Mr. Woodyatt will convey a pretty general knowledge of the work of the *Montcalm,* the nature of the ice and show that the conditions were quite different from those which existed in the Northumberland strait. The work of the *Montcalm* was remarkable for the immense quantity of ice removed. Each day's work was similar to the one preceding with the exception of interruptions caused by the wind, weather and tides. The channel cut was about 1,200 feet wide which gave the steamer room to work and permitted the ice as it was detached from the main body, to float down stream.

'Friday, February 26.—The *Montcalm* left dock at 11,00, just at high water, and proceeded up the river to the ice bridge. When she started work at the beginning of the season the bridge extended down as far as the piers of the Quebec bridge. The *Montcalm* has been cutting a channel about 1,200 feet wide through the centre of it. The ice we were working in this morning was about three feet above the surface, and from 15 to 20 feet below. It consists of a tightly jammed mass of broken ice and snow. The ice is a great deal glassier than the salt water ice, and much more brittle. It parts or cracks with a report, and the thin shell ice, as it is borken by our sea, sets up a rattle which is entirely missing from the salt water ice of the same kind. The *Montcalm* bangs at the ice and, on hitting fresh unbroken stuff, goes into it for about 30 feet. If no large crack appears, another drive is taken in the same place but if a crack appears, the next drive is taken so as to shake the piece off. The size of the pieces separated vary, up to about 30 feet across. The ice floats away with the ebb tide and does not bother us any more. The *Montcalm* has been handicapped considerably so far this season by the fact that her boilers have been undergoing repairs, so that she has never had more than three out of the four in service at one time. At the first of the bridge the ice was about 15 feet out of water in a great many places and progress was slow, at the rate of about 50 feet per day (1,200 feet wide), but now we are doing between 200 and 300 feet per day. The fore tanks are all filled and the

bow well down, in contrast with the fighting trim of the *Stanley*. They are afraid to run up on the ice as it might be too thick to crush, in which case she would stick until they could shift the water ballast. She does not turn the ice under, but rather crushes it sideways, the ice crumbling into snow and piling up on each side of the bow. On reversing she slides away without any sticking, other than a slight mechanical one when she runs up a little too far.'

'Monday, April 5.—Left at 6 a.m. The sun became very hot. The river in front of Quebec was full of ice, the remains of the bridge and the battures. We found the ice loose up to Cap Rouge and from there up to a point about four miles below Pointe-aux-Trembles, the river was clear. At this point we ran into the board ice about one foot thick and floating about one inch above the water. The stream is covered with this kind of ice as far up as the Richelieu Rapids where there is a clear space. The ice is covered with alternate patches of thin snow and water (probably from the melting of the snow). It is very clear and glassy and has all the colours from green to light blue. In some places it is honeycombed. The *Montcalm* is altogether unsuitable for this kind of ice. She crowds into it for distances varying from 150 to 400 feet, according to headway and steam and brings up solid. The *Stanley* would travel through this at from four to five miles an hour. However, there is a very strong current, five or six miles an hour, and that holds her back considerably. She does not crush the ice as the *Stanley* does, but tries to split it, and as there is no give to the ice, it being solid to both shores, she wedges herself into it. Instead of the ice turning down as it did when the *Stanley* got into a pan it rises and squeezes the ship. By backing and driving all the time we cut a passage our own width up to a point about a mile above St. Antoine church and then turned back. We found clear water on our way back until we got below Quebec bridge when we found the river still full of large pieces of floating ice, as in the morning.'

In summing up the work of the *Montcalm* at Cap Rouge, Prof. Barnes describes the manner in which the steamer negotiated the immense jam of ice and the cause or causes of the accumulation. Frazil is referred to and its action upon the steamer when endeavouring to force her way through it. He describes its formation, the great quantity, elasticity and adhesiveness of this troublesome ice and indicates a method by which a steamer may overcome it and clear herself. He states, 'It is sufficiently evident that the performance of the *Montcalm* was very satisfactory, and that she succeeded in enabling the ice to move out of the river much earlier than usual. No trouble to speak of was experienced at any point below where the ship was working. The only trouble was from the large pieces of ice cut off being blown back by wind and carried by the tides. This condition need not have occurred had the *Montcalm* been put to work earlier in the winter, before the ice jam at the narrow part of the river below Cap Rouge had formed. It was but the work of a few days for this jam to form and during that time the ship was not at work. It seems highly probable that the ship could have prevented the bridge from forming and thus allowed the masses of ice coming down from above, to be carried down the river. The ship had no trouble in keeping the river clear below the cut. There seems to be little reason why one or two powerful ice-breakers should not be able to keep the river clear from Quebec to Lake St. Peter at least. One difficulty might be encountered in the masses of frazil that would be forced in the open water. No form of ice gives the ice-breaker so much trouble as frazil or lolly ice. The ship is practically helpless when surrounded by masses of this material, chiefly from the difficulty of gaining sufficient water to float. It masses under the ship and by its buoyancy, and in cold weather its adhesiveness, pushes up and sticks to the plates. In the Northumber-

land straits the *Stanley* was time and again completely stopped from the clinging of this ice. An observation made by Mr. Woodyatt on April 10, when stuck in the frazil, may help to indicate a way in which a ship may get free of this ice.'

'The presence of the frazil is always observed to lift up the surface ice. As soon as the surface sheet was carried off by the blow of the ship the frazil rapidly floated up and filled the opening. In so doing it surrounds the ship and squeezes out the water necessary for the ship to float. When in this condition it was observed that the frazil became rapidly melted and loosened on each side just at the point where the circulating water was discharged. The writer has shown elsewhere that frazil is easily disintegrated by a very minute temperature elevation in the water, which is so small as to have absolutely no effect on an ordinary thermometer. With the discharge water at 60° F. it was evident at once that this was sufficient to raise the temperature of the water high enough to disintegrate the frazil at and below the point of discharge. Had the circulating water been carried up to the bow of the ship and discharged there it is evident that the frazil from the bow aft would have been rapidly loosened and sufficient water available to float the ship away. The writer feels that an ice-breaker equipped with steam injectors at the bow would always be in a position to loosen the lolly or frazil and never be seriously impeded by it.

'The hydrograph records made by Mr. Woodyatt seem to indicate on a day of low relative humidity, when the evaporation of the ice and water is rapid that the ice is more resistant. At present, however, there is not sufficient data to definitely prove this point. It is a most unexpected phenomenon and deserves more careful investigation. A very large amount of heat is absorbed in the evaporation of a pound of ice or water at the freezing point, considerably more than the evaporation of a pound of water at the boiling point. Hence when evaporation is rapid as we know it to be over the surface of ice and water, the ice is more easily cemented together and the water is more rapidly congealed.'

LIFE SAVING SERVICE.

Monthly reports from the coxswains in charge of the life saving stations were received and the number of drills indicated. There were no casualties of importance reported, consequently the boats were used only for drilling purposes.

The motor life boat stationed at Banfield on the west coast of British Columbia broke from her moorings in a storm and became a total wreck on Robber island, Barkley Sound. It was determined to withdraw the crew from the station, but before they left they were instrumental with the assistance of the crews of the *Leebro* and *Tees,* in saving the lives of nine of the crew of the American schooner *Sequel* on January 24, 1909.

The surf boat belonging to Clo-oose station was sent to Banfield station and is in charge of a keeper.

Work was resumed on the west coast trails by a force of twenty men who were engaged in constructing the road and building bridges over the ravines. Twelve miles of road were completed during the year.

There are now 34 stations in the Dominion and they will be found enumerated with the kind of boats used, as usual, in the statement now in the report of Admiral Kingsmill, which forms Appendix No. 19 of this report.

WRECKING PLANT.

The yearly subsidies were paid to contractors when they became due and proof shown of the maintenance of the plant, in readiness to render assistance in cases of casualties to vessels. The amount of the subsidy to each contractor is $10,000 per annum, paid semi-annually.

The contracts were made for a period of five years with each contractor. For the Lower St. Lawrence the contract was made with Messrs. Geo. T. Davie & Sons, Lévis, P.Q.; headquarters of the salvage plant, at Quebec; for the maritime provinces with the Dominion Coal Company, headquarters of the salvage plant, North Sydney, C.B.; for British Columbia, the British Columbia Salvage Company, headquarters for the salvage plant Victoria.

The following is a list of vessels assisted or salved by the plant of Messrs. Davie & Sons during 1908.

May 12, towed ss. *Ottawa* into graving dock after collision on the way between Quebec and Montreal. May 19, salved the D.G.S. *Montcalm,* sunk at Pointe-a-Carey wharf after collision with the *Milwaukee,* and towed the vessel to graving dock; July 1, assisted ss. *Amethyst* which had been ashore at Goose island, to Quebec; August 15 salved ss. *Portsmouth,* ashore at Cap Chatte and towed her to Quebec; August 30, towed steamer *Murray Bay* from Tadousac to Sorel. September 6, salved ss. *Gustaff Adolphe* and towed her to Quebec from Goose island where she had stranded; September 13, salved ss. *Malin Head,* ashore Orleans island after colliding with the *Corinthian* and towed her to port; October 12, salved the ss. *Inishowen Head,* ashore at Wolfe's Cove; October 6, escorted ss. *Ashanti* from Madam island to Quebec; November 10, salved bark *Cambria,* ashore at Ste. Anne-des-Monts, and towed her to Quebec; November 20, proceeded from Quebec to ss. *King Edward,* ashore at Anticosti, but owing to lateness of season it was decided to let wreck remain until spring of 1909. December 1, proceeded to bark *Signi* ashore at Anticosti, with surveyors who found vessel submerged and condemned her.

The services rendered by the Dominion Coal Company's wrecking plant is reported as follows:—

February 17 and 18, ss. *Louisburg* assisted the ss. *Mount Temple* at Ironbound island. Made three unsuccessful attempts to float the *Mount Temple.*

April 14 to 20, ss. *Cacouna* trying to pick up ss. *Britz Huel* near Cape Sable spent six days searching.

April 20, tug *Douglas H. Thomas* with fire pump extinguished fire on board schooner *Davis* at Louisburg after she was abandoned by crew. Vessel had number of tanks of gasoline on board.

April 15, tug *Douglas H. Thomas,* went in search of missing vessels after a severe gale. All the missing vessels were located.

April 30 to May 3. Tug *Douglas H. Thomas* searched for the ss. *Norwood,* abandoned by crew near St. Pierre.

May 1. Tug *C. M. Winch* went to the assistance of schooner *Ronald L. Smith* which was ashore at Flat Point.

May 9. Tug *C. M. Winch* went to the assistance of the ss. *Weymouth* which was ashore at Petries Ledge, but the steamer floated before tug's arrival.

May 11. Tug *Douglas H. Thomas,* towed schooner *Pleasantville* from Canso to Louisburg. This schooner had become disabled.

May 18 to June 3. Tug *Douglas H. Thomas* assisted ss. *Trold* which had been in collision with the ss.*Ottawa,* from Gaspé to Three Rivers.

July 9. ss. *Coban* proceeded from Chatham, tug *Douglas H. Thomas* from Louisburg and ss. *Cabot* with wrecking outfit from Sydney to the assistance of the ss. *Arcola,* ashore at St. Paul's island, but steamer was in such a condition that nothing could be done with her.

July 29, ss. *Cabot* went to the assistance of the schooner *Milo* at Richibucto.

August 3.—Went to the assistance of the ss. *Pors,* which was high and dry on the beach at Port Hood. She was floated with the assistance of the wrecking pumps. Tug *Douglas H. Thomas,* steamers *Coban* and *Cape Breton* and a dredge which we had on hire.

August 15.—Tug *Douglas H. Thomas* went to the assistance of the ss. *Bruce,* which was ashore at Port au Basque and also offered the *Bruce* owners the services of the ss. *Louisburg,* which was then at Sydney, but services were declined.

August 26.—Offered schooner *Evande,* which grounded near schooner *Pond,* the services of our tug, but the same was declined, the captain preferring the tug *Merrimas,* as the same owners were interested in both vessels.

October 5 to 7.—Tug *Douglas H. Thomas* was in search of the water-logged schooner *George Sturges,* which was reported near the Magdalen islands, but failed to locate her.

October 27.—Sent tugs *C. M. Winch* and *Douglas H. Thomas* to the assistance of the ss. *Pors,* which was ashore on Petrie's ledge.

December 3 to 7.—Tug *Douglas H. Thomas* went to the assistance of the Elder-Dempster steamer *Bornu,* which was ashore at Gaspé.

The report of the work done by the British Columbia Salvage Company contains the number of vessels assisted or salved during the year 1908.

Five days' searching for ss. *Otter,* reported ashore off the west coast of Vancouver island, with broken tail shaft.

SS. *Vadso* ashore at Cape Lazo. Arrived at *Vadso,* January 18, 1908, returned to Victoria with vessel January 27. She was stranded N. 58 E. three-quarters of a mile distant from Cape Lazo, and was full of water; passengers taken off and landed at Union and sent from there to Victoria.

SS. *Iroquois* ashore at Jack's Point, near Nanaimo, vessel being full of water, was raised, pumped out and brought to Victoria, working four days, from October 27 to 30.

Steamer *Owen,* sunk at Cowichan gap, raised vessel, pumped out and brought to Victoria, working five days, from November 16 to 20.

SS. *Charmer,* ashore Vancouver narrows, near Brockton point December 3 to 5, inclusive, dense fog, vessel patched, pumped out and conveyed to Victoria.

Tug *Hope,* ashore at Boat Harbour from December 5 to December 8. Vessel full of water, was raised, pumped out, patched and towed to Victoria.

SS. *Northland* ashore at Enterprise Reef, November 27 and 28. Steamer hauled off rocks and towed to Seattle.

HALIFAX DOCKYARD.

The admiralty dismantled the dockyard and for some time it had received no attention in the way of keeping it trim. The agent of the department recommended

improvements in the yard and repairs to the wharfs. For this purpose a number of men were employed in putting the yard in order, removing trees, and mending roadways. Several miles of submarine cable was stored in tanks. Wharf No. 4 was repaired by the removal of decayed portions and a new top put on it.

No. 3 pier has the heavy lifting crane upon it by which the heaviest buoys, moorings and materials are handled in connection with the buoy and lighthouse service. Upon this wharf, cinder covering to the depth of 6 inches was placed. His Majesty's naval ships bunker their coal at this wharf from the Welsh coal stored in the sheds. The appearance of the grounds has been greatly improved as the result of the labour employed and the work done.

INVESTIGATION INTO WRECKS.

The investigations into the cause of wrecks and casualties in 1908 were held as usual, but up to the time of the preparing of this annual report no report containing the judgments of the former Wrecks Commissioner and Assessors has reached the department. The list of casualties into which investigations were held forms Appendix No. 16 of this report.

WRECKS AND CASUALTIES.

Of sea going vessels 278 Canadian registered vessels with a tonnage of 16,571 were partially wrecked or totally lost and 26 foreign vessels were partially wrecked or totally lost in Dominion waters. Thirty-eight lives were lost and the value of property destroyed was $1,222,976.

Of inland vessels 27 Canadian registered vessels were partially wrecked or totally lost, with a tonnage of 9,096, and 7 foreign vessels in Dominion waters. Total value of property destroyed, $340,910.

METEOROLOGICAL SERVICE AND MAGNETIC OBSERVATORY.

The Meteorological Service and Magnetic Observatory are under the direction of Mr. R. F. Stupart, who has reported upon the operations of the fiscal year ending March 31, 1908.

There are now 445 stations more or less completely equipped for meteorological observations; 410 observers have furnished daily, weekly or monthly reports to the central office. The number of persons receiving pay in connection with the services is 238, of this number 24 are permanently employed in the Central Office, Toronto. At outside stations a few officers devoted the whole of their time to the service, others were employed during a portion of each day and some were employed only to display storm signals. The observers at 39 stations were paid salaries for two or more observations daily and telegraphed to Toronto. At 58 other stations, chiefly in outlying districts, the observers received remuneration for a more or less extended series of observations. Special observations during the summer months were collected at Winnipeg from 25 stations in the western provinces and embodied in a bulletin widely disseminated westward; for this bulletin service remuneration was allowed. Eighty-five persons were paid as storm signal agents and seven for special duties in connection with the time service. Over 200 observers report voluntarily, thereby contributing valuable information regarding the climate of the Dominion.

The work at the Central Office was carried on under difficulties, in temporary quarters, pending the completion of the new meteorological building.

Weather forecasts covering 36 hours in advance and sometimes a longer interval, were issued twice daily, throughout the year. The weather charts on which the forecasts are based have information telegraphed from 37 stations in Canada, 64 stations in the United States and from St. John's, Newfoundland, and Bermuda. Morning forecasts were sent to the ports of the maritime provinces and to the western provinces and then followed a forecast for Ontario and Quebec and published widely in the press as well as being posted at post offices, telegraph offices and other frequented places. The evening weather chart is prepared and a bulletin issued for the press throughout the Dominion except British Columbia, in which province a local officer issues the forecasts, under the direction of the superintendent at Toronto.

During the winter months, a large number of special forecasts were made for shippers of perishable goods. Special warnings of snow and drift were issued to all Canadian railways and electric railways, for night service, in connection with snow blockades. Owners and masters of vessels consult the central office in the fall of the year.

Between April 1, 1908, and March 31, 1909, 1,555 warnings were issued to Canadian ports, 89·8 per cent of which were verified. The number of storm signal stations has been increased. There were fewer storms than in the preceding year, but many gales of more or less severity; 102 out of a total of 131 being in November, December, January, February and March.

Arrangements have been made to supply forecasts and storm warnings to the government of Newfoundland. Full meteorological equipment has been furnished six stations between the Athabaska river and the Arctic sea, namely at Fort McMurray, Hay river, Fort Norman, Fort Good Hope, Fort Simpson and Fort Macpherson. From reports recently received it is evident that valuable data will be furnished regarding the path of storms across America and respecting the mean distribution of pressure in high latitudes.

Tables of predictions and verifications are included in the report of Director Stupart, also the report relating to the Magnetic Observatory at Toronto and Appendices A and B, from the observers at St. John and Quebec and tables showing the difference of times between Quebec, Montreal, St. John and Toronto.

The report contains information respecting solar work, seismology, time service and inspection of stations. It forms Appendix No. 7 of this report. The expenditure for this service was $124,717.06 for the fiscal year.

STEAMBOAT INSPECTION.

Canadian registered vessels inspected during the fiscal year numbered 1,680; gross tonnage, 382,170. Vessels inspected, but not registered in the Dominion, numbered 184; gross tonnage, 282,275 tons. The amount of fees collected for inspection was $7,927.54.

The total expenditure in connection with inspection amounted to $41,226.47, but part of this expenditure was for Dominion steamers and fog-alarms. The report of the chairman of steamboat inspection forms Appendix No. 9.

NAMES OF INSPECTORS.

Name.	Position.	Residence.
Edward Adams	Chairman of Board of Steamboat Inspection	Ottawa.
M. P. McElhinney	Inspector of hulls and equipment	"
I. J. Olive	" "	St. John, N.B.
Chas. W. Sealey	" "	Halifax, N.S.
William Evans	" "	Toronto, Ont.
M. R. Davis	" "	Kingston, Ont.
Philippe Duclos	" "	Quebec, P.Q.
Stephen D. Andrews	" "	Collingwood.
John Dodds	" "	Toronto, Ont.
E. W. McKean	" "	Collingwood.
J. B. Stewart	" "	Toronto, Ont.
T. P. Thompson	" "	Kingston, Ont.
Wm. Laurie	" "	Montreal, P.Q.
L. Arpin	" "	"
F. X. Hamelin	" "	Sorel, P.Q.
J. Samson	" "	Quebec, P.Q.
J. P. Esdaile	" "	Halifax, N.S.
C. E. Dalton	" "	St. John, N.B.
J. A. Thompson	" "	Victoria, B.C.
G. P. Phillips	" "	Kenora, Ont.
Frank M. Richardson	" "	Vancouver, B.C.
C. T. Schmidt	" "	Halifax, N.S.

MASTERS AND MATES.

The number of applicants for masters' sea-going certificates who passed examinations were 8; mates, 15, and 8 failed to pass; second mates, 12 passed and 8 failed. Of the applicants for inland and coasting and minor waters certificates 70 masters passed, 21 failed; 93 mates passed and 25 failed; 4 sea-going certificates of competency to masters were issued, 8 certificates to masters inland and coasting, and 2 to mates; 2 service certificates to masters and 4 temporary certificates were issued.

The expenditure during the year for this service was $8,244.56, and total amount of fees $4,192.50, showing an excess of expenditure over receipts of $4,052.06.

The following statement shows the total receipts and expenditure on account of masters and mates since 1900.

——	Expenditure.	Receipts.
	$ cts.	$ cts.
For fiscal year ended June 30, 1900	3,750 69	4,221 50
" " 1901	3,720 25	4,808 24
" " 1902	3,305 59	5,288 52
" " 1903	4,968 36	5,790 50
" " 1904	7,761 17	4,795 00
" " 1905	5,884 74	4,643 85
" " 1906	7,068 15	5,526 00
" March 31, 1907-8	5,934 16	2,294 50
" " 1908	11,508 31	4,306 05
" " 1909	8,244 56	4,192 50
	62,145 98	45,866 16
	45,886 16	
	16,279 82	

The report of Capt. L. A. Demers, chief examiner of masters and mates, forms Appendix No. 14.

MARINE SCHOOLS.

The report of Capt. Demers, chief examiner of masters and mates, upon marine schools furnishes information respecting the number of lectures delivered and the attendance of seafaring men. Nine examiners of masters and mates delivered 284 lectures and the attendance was 3,998. The lecturers are men of experience in navigation and their lectures contain instruction of a valuable nature to men who purpose undergoing examinations for certificates. The report on marine schools forms Appendix No. 15.

SICK AND DISTRESSED MARINERS.

Under the provision of the Canadian Shipping Act, chapter 113, part V., s. 384, R.S., dues of 1½ cents per ton, registered tonnage, are levied on every vessel entering any port of the province of Quebec, Nova Scotia, New Brunswick, Prince Edward Island and British Columbia. The money thus collected forme the 'Sick Mariners Fund.' Vessels of the burden of 100 tons and less pay the duty once in each calendar year, and vessels of more than 100 tons registered tonnage three times in each year.

The officers and seamen of all fishing vessels not registered in Canada, do not pay sick mariners' dues nor participate in the benefits accruing therefrom, but such vessels registered in Canada may pay dues and participate in the benefits, and if more than 100 tons, only for the voyage at the beginning of which payment has been made, but vessels shall enjoy the same rights and benefits as are enjoyed by vessels which pay dues but are not engaged in fishing.

The receipts for the fiscal year ended March 31 last, amounted to $67,483.46; the expenditure for the several provinces for sick seamen amounted to $54,989.85, and for distressed seamen $2,004.02; total, $56,993.87.

The receipts of sick mariners' dues from each of the provinces are as follows:—Quebec, $17,072.10; New Brunswick, $10,258.37; Nova Scotia, $20,108.06; British Columbia, $19,725.09; Prince Edward Island, $314.04.

The expenditure for each of the provinces is as follows:—

General account	$ 1,297 29
Nova Scotia	23,863 07
Prince Edward Island	4,259 58
New Brunswick	6,569 09
Quebec	9,194 00
British Columbia	9,806 82
Total expenditure	$54,989 85

The 'Sick Mariners' Act' does not apply to the province of Ontario, so no dues are collected from vessels in that province.

At the port of Quebec, sick mariners are cared for at the Jeffrey Hale and the Hotel Dieu hospitals, at a per diem allowance of $1.50 per seaman, including medical attendance and board.

At the port of Montreal, sick seamen are cared for at the General Hospital and at Notre Dame Hospital. The charge per diem for each seaman, including board and medical attendance, was $1.50.

Marine hospitals are maintained in Louisbourg, Yarmouth, Pictou, Sydney, Lunenburg and Point Tupper, in the province of Nova Scotia; and the sick seamen at Halifax, N.S., are cared for in the Victoria General Hospital for $1.50 per diem per man, including board and medical attendance.

At Charlottetown, Prince Edward Island, sick seamen are cared for at the Charlottetown and the Prince Edward Island hospitals under arrangements made by the department with the managers of those institutions, $1.50 per day, same as others.

The marine hospital at Victoria, British Columbia, has a medical superintendent who receives $600 per annum and a keeper whose salary is $600 per annum. He is also allowed $5 per week for the board and attendance of each sick mariner.

At Vancouver, sick seamen are attended at St. Paul's hospital at a cost of $1.50 per day each.

At St. John, N.B., sick seamen are attended at a cost of $1.50 per day each.

Where no hospital is maintained in the maritime provinces, Quebec and British Columbia, the collectors of customs are authorized to care for sick seamen when the vessels to which they belong have paid sick mariners' dues.

Statement of receipts and expenditure on account of 'Sick Mariners' and 'Distressed Seamen' from the fiscal year 1900 to 1908, both inclusive:—

Year.	Receipts.	Expenditure.
1900	$59,971 84	$32,743 30
1901	59,783 34	34,944 93
1902	65,853 83	51,827 12
1903	64,851 55	48,151 48
1904	61,778 29	50,801 78
1905	58,372 34	51,000 18
1906	60,183 90	50,120 42
1907	44,704 59	37,362 11
1908	69,364 45	59,957 92

The report of C. H. Godin, M.D., medical superintendent of marine hospital service forms Appendix No. 13.

INSPECTION OF LIVE STOCK SHIPMENTS.

The inspectors of live stock shipments have reported regularly and furnished a statement of cattle, sheep, horses, hay and grain shipped to the United Kingdom from the ports of Montreal, St. John, N.B., and Halifax.

It will be seen that the total number of cattle, sheep and horses shipped was greater than last year but much less than previous years going as far back as 1902-3.

The shipments from Montreal were as follows:—Cattle, 99,830; sheep, 10,111 and 116 horses. The United States cattle shipped via Montreal were 10,398, but that number is included in the total of 99,830.

The shipments from St. John, N.B., were 22,923 cattle, 151 sheep and 65 horses; of the cattle 220 were United States cattle.

The shipments from Halifax were 3,097 cattle.

The statement of live stock shipments forms Appendix No. 12 to this report.

REPORTS OF AGENTS OF THE DEPARTMENT.

The reports of the agents of the department at Halifax, N.S., St. John, N.B., Quebec, Charlottetown, P.E.I., Victoria, B.C., and Montreal were received. These reports contain information relating to the construction of lighthouses, the moving of the steamers under the control of the agents, particulars relating to repairs to lighthouses, the placing of new buoys and maintaining the system of buoys. The works in the agencies where workshops are established are reported upon, also the delivery of lighthouse supplies to the various lighthouses by the agents or superintendents of lighthouses, where there are superintendents. Much detailed information is furnished respecting the operations in these agencies. The correspondence between the department and the agents was large for the year 1908. Instructions were given directly to the agents relating to the carrying out of the work and matters of importance which arose in the agencies were referred to the department for decision.

Attached to each agency are superintendents of lights who inspect the lighthouses and buoys, deliver supplies of oil and other material required for the maintenance of the lights. The Superintendent of Lights for Ontario confines his inspection to the condition of lighthouses and the delivery of supplies above Montreal. His office is at Ottawa.

LIGHTHOUSE BOARD.

Five meetings were held during the fiscal year and applications and recommendations for aids to navigation in the provinces of British Columbia, Quebec, Manitoba, Nova Scotia, New Brunswick, Ontario and Prince Edward Island were considered. The aids to navigation most urgently needed were recommended for approval.

MERCHANT SHIPPING.

The regulations with respect to ship's names which came into force on the 1st January, 1908, have been strictly carried out, and the name of every ship registered during the year has been submitted to this department for approval.

Supplements to the 'List of Shipping' were published every month, and those affecting this list and issued up to date are bound with this volume.

The total number of vessels remaining on the register books of the Dominion on the 31st December, 1908, was 7,602, measuring 702,324 tons, being an increase of 74 vessels and 3,636 tons as compared with 1907. The number of steamers on the register books on the same date was 3,084, with a gross tonnage of 483,031 tons. Assuming the average value to be $30 per ton, the value of the registered tonnage of Canada on the 31st December, 1908, would be $21,069,720.

The number of new vessels built and registered in the Dominion of Canada during the last year was 304, measuring 28,983 tons register. Estimating the value of new tonnage at $45 per ton, gives a total value of $1,304,235 for new vessels. This shows a slight falling off as compared with last year, but the year 1908 was not remarkable for its shipbuilding activity, not as regards Canada alone, but throughout

the whole maritime world. However, despite this, the tonnage on the register books at the close of 1908 shows that Canada maintains her place amongst the maritime states of the world.

The list of vessels is published in the report called 'List of Shipping.' In that report is a statement showing the tonnage of each of the maritime states of the world, and that Canada ranks tenth in the list of countries, but the registered tonnage of the Dominion is not given, owing to the fact that Canadian shipping is included in the tonnage of Great Britain.

LIGHTHOUSE KEEPERS.

During the year the lightkeepers were classified and the salaries for the last quarter of the fiscal year were paid in accordance with the new classification. The list of light-keepers has been revised and is published in Appendix No. 10 of this report.

PORT WARDENS.

The port wardens of the Dominion reported at the end of the calendar year. Their reports will be found in supplement No. 1 to this report.

PILOTAGE.

The reports of the different pilotage authorities for the calendar year 1908 were received. These reports contain statements of the number of vessels piloted within the pilotage districts in and out of port, also financial statements of receipts and expenditures in connection with each district. The rates of pilotage charges under the by-laws will be found in these reports, which are published in Supplement No. 1 to this report.

MONTREAL HARBOUR COMMISSIONERS.

The report of the Harbour Commissioners, for the calendar year ending 31st December, was forwarded to the department as required by law. The report contains valuable information respecting improvements made during the year in the harbour. The harbour was extended to embrace the water front as far as the end of Montreal island. The total sea-going and inland tonnage of vessels which entered and cleared during 1908 was 5,548,028, being the largest in the history of the port, and 1,092 tons greater than in 1907. The increase in tonnage has been attributed to the improvements in the piers, sheds and in the St. Lawrence river ship channel. The facilities for loading and unloading large steamers embrace all modern improvements. While the average length of time taken in European ports for loading and discharging cargo is 10,000 tons in 14 days, in Montreal 13,750 tons have been handled in three days.

The Canadian Pacific liner *Mount Royal* discharged 4,250 tons inward and took on 9,500 outward of general cargo in 53 hours. The Allan line *Hesperien* has been unloaded and loaded in 40 hours. The saving effected by the new facilites has been 22 cents per ton. A floating crane has been added to the equipment for handling heavy machinery.

The financial statement of the commission is included in the report, which will be found in supplement No. 1 of this report.

TORONTO HARBOUR COMMISSIONERS.

The number of vessels which entered Toronto harbour during the season of 1908 was 3,330, registered tonnage, 1,521,165. The report of the Toronto Harbour Commissioners is published in Supplement No. 1 of this report.

QUEBEC HARBOUR COMMISSION.

The Quebec Harbour Commissioners have reported respecting the improvements in the harbour. Three hundred and four vessels of a registered tonnage of 1,335,460 entered the harbour and discharged 206,459 tons of freight, 57,023 tons of coal, and 146,632 tons of grain; 72 vessels of 197,872 tons loaded 72,488 tons of cargo, 70,900 immigrants were landed from the different ocean liners at the immigration station. No records were kept of the cabin passengers. The report and financial statement of the commissioners is published in Supplement No. 1 of this report.

THREE RIVERS HARBOUR COMMISSION.

The number of ocean going steamers which entered the harbour of Three Rivers was 44 of a tonnage of 86,000 register, but a large number of barges, canal boats and tugs entered and cleared, amounting to about 160,000 tons. The report of the commissioners is published in Supplement No. 1 of this report.

SYDNEY AND NORTH SYDNEY HARBOUR COMMISSION.

The number of vessels which entered the ports of Sydney and North Sydney was 2,084, of a registered tonnage of 1,211,557. From these ports were shipped 2,203,298 tons of coal and 22,163 tons of steel rails by water to points outside of Canada. The receipts and expenditure will be found in the report of the commissioners, which is published in Supplement No. 1 of this report.

CORRESPONDENCE.

About 43,705 letters were received in the department during the twelve months ended March 31, 1909. The correspondence was carefully filed and replies sent as far as necessary. About 28,000 letters were sent out during the same period. Registered letters inclosing cheques sent out by the accountant's branch, forms, reports, circular letters and notices inviting tenders are not included in the number of letters enumerated, simply the letters inclosing them.

The forms are numerous and require special attention as the matters to which they refer are important. The tenders received are entered and passed upon and tenderers notified.

There has been an increase of about 5,000 letters received and about 8,000 sent out. In the records branch the letters received are carefully examined, entered and placed on file, and the copy of the reply attached so that the letters and replies can readily be seen and any subject easily followed up.

WIRELESS TELEGRAPHY.

Twenty wireless stations were operated by the department during the year, all of which worked satisfactorily.

The report of the superintendent of wireless stations forms Appendix No. 17.

SABLE ISLAND.

The annual report of Mr. R. J. Boutillier, superintendent of Sable island, was included in the report of the agent of the department at Halifax.

No known wrecks occurred in the vicinity of Sable island during the year, but White point and Sambro automatic gas buoys drifted ashore in January. The buoys were shipped on board the *Lady Laurier* early in the season.

The life-saving boats and equipment were in good condition. The island was patrolled forty-two times in day and thirteen times at night.

The men's quarters were removed a distance of 100 feet farther south and an addition of seven rooms and concrete cellar walls were built under the main building and the addition. Concrete walls were placed underneath the cattle barn and a concrete floor and other improvements and repairs to buildings were made.

The farming was carried on as usual, but owing to the unusually dry season, the results were not equal to previous years.

The live stock on hand consists of 70 head of cattle, 30 trained ponies, 3 imported stallions, 5 imported mares and 5 hogs. Of the wild ponies, 49 were shipped and 200 remain on the island.

The Sable island staff, consisting of Superintendent Boutillier, keepers of light stations and their families, life boat keepers, wireless telegraphy staff and surfmen, number 41.

The report of Superintendent Boutillier forms Appendix No. 18.

LEGISLATION.

Section 16 of the Government Harbours and Piers Act, Chapter 112 of the Revised Statutes of 1906, is repealed and a new section substituted relating to leasing to any provincial government, municipal council, harbour commission, shipping company or railway company, any wharf, pier or breakwater under the control of the Minister of Marine and Fisheries.

Section 1 of chapter 30 of the Statutes of 1907, An Act to provide for further advances to the Harbour Commissioners of Montreal, is amended by adding thereto subsections 2 and 3, relating to the interest on advances and time limit for construction.

Section 5 of the Montreal Harbour Commissioners Act, 1894, chapter 48 of the Statutes of 1894, is repealed and a new section substituted defining the port of Montreal; section 2 of the same Act places the port under the jurisdiction of the Minister of Marine and Fisheries.

Section 6 of the same Act is repealed and a new section substituted, defining the harbour of Montreal and limiting the jurisdiction of the corporation.

Section 7 of the same Act was amended by striking out the words, 'of the port of Montreal and.'

Section 19 of the same Act is repealed and another section substituted, relating to the jurisdiction over the harbour.

Paragraph 3, of subsection 2, of section 22, of the same Act is repealed and paragraphs 3, 3A and 3B, substituted relating to the powers of the corporation.

Paragraph (*b*) of section 26 of the same Act is amended by striking out the word, 'port' and substituting the word 'harbour,' relating to rules for navigation.

Paragraph (*c*) of the said section of the same Act is repealed.

Paragraph (*e*) of the said section of the same Act is amended by striking out the word 'port' and substituting the word 'harbour.'

Paragraph (*r*) of the said section of the same Act is amended, relating to procedure.

Subsection 1, of section 38, of the same Act, is amended, relating to pilotage dues.

Paragraph (*a*) of section 39, of the same Act, is repealed and another paragraph substituted, relating to seizure for unpaid rates.

Subsection 4, of section 41, of the same Act, is amended by striking out the words, 'for pilotage dues, or is due.'

Subsection 1, of section 44, of the same Act, is repealed and another subsection substituted, relating to special jurisdiction of corporation.

Paragraph (*b*) of section 13, of the Navigable Waters Protection Act, Chapter 115 of the Revised Statutes, 1906, is amended; section 14 of the same Act is amended; section 16 of the same Act is amended, relating to removal of obstructions; paragraph (*b* of the same Act is amended; section 18 is amended by adding Part III, Interpretation and General.

The French version of section 851 of the Canada Shipping Act, Chapter 113 of the Revised Statutes, 1906, is amended by adding at the end thereof the words, 'et il peut aussi nommer des adjoints du maître de havre à tout tel port.'

G. J. DESBARATS.

Acting Deputy Minister of Marine and Fisheries.

APPENDIX No. 1.

ANNUAL REPORT OF THE CHIEF ENGINEER OF THE DEPARTMENT OF MARINE AND FISHERIES.

The Acting Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit the following report of the work done in the several services under the supervision of this office during the twelve months ended March 31, 1909.

This embraces work done at departmental headquarters on the construction of lighthouses, lightships and fog-alarms, the supervision of construction and repairs of lifeboats; the administration of the vote for the removal of wrecks and obstructions in navigable waters; tidal and current surveys; and the publication, examination and correction of hydrographic charts ; construction of and repairs to fish hatcheries and refrigerators; engineering points in connection with the construction and maintenance of fish-passes; supervision of surveys of oyster beds; examination of applications for foreshore, wharf and other water lots as they affect the interests of navigation; preparation and publication of notices to mariners and hydrographic notes, &c.

STAFF.

There is a special staff appointed for the tidal and current survey work; the remainder of the work of the branch is attended to by the general staff of the office.

The following changes have been made during the year in the staff of my office:

On September 19, 1908, Mr. F. P. Jennings was appointed a draughtsman at $75 per month.

On July 20, 1908, Mr. E. M. Longtin, formerly an assistant engineer in my branch, was appointed to succeed Mr. O. Arcand as district engineer for the Montreal district, at a salary of $1,400.

During the year assistants from the office were sent out to supervise works of construction as follows:—M. de Miffonis, building reinforced concrete lighthouse towers at Cap Anguille, Newfoundland, Father Point, P.Q., and Estevan Point, B.C.; Mr. W. C. Surtees, superintending construction of reinforced concrete beacon at Spruce Shoal, Ont., and reinforced concrete lighthouse tower at Cape Croker, Ont.; and Mr. F. P. Jennings, examining site for construction of a new pier at the Lower Traverse, P.Q.

The assistant engineers appointed to attend to details of construction in the several outlying portions of the Dominion have rendered me valuable assistance, and I wish again to bear testimony to the efficient work done by Mr. Légère in the maritime provinces, Mr. P. E. Parent in the Gulf of St. Lawrence and Mr. J. F. Murphy on the upper lakes; also to the fact that since Mr. Légère was appointed acting agent at St. John Mr. Fosbery has been acting as assistant engineer in Halifax and doing very acceptable work. In consequence of the very great quantity of construction work in contemplation this coming season in British Columbia. it will be absolutely essential that there should be an engineer resident in that province next summer,

and I propose sending my chief assistant, Mr. B. H. Fraser, to the Pacific coast at an early day to organize the season's work.

Mr. F. McDonnell, of my office, is employed as assistant inspector of fog alarms, and has during the past season been sent to the several stations on the great lakes to make a thorough inspection of the machinery with a view to later overhaul, to bring these stations up to the standard of modern requirements.

PERSONAL INSPECTIONS.

Personal inspections of construction work in progress have frequently been made during the year by Mr. Fraser and myself, and it is very desirable that such personal supervision of work should be extended as much as possible in the interests of efficiency. Examination of localities where work is proposed should always be made before the plans are prepared, and in the interests of both efficiency and economy it is to be regretted that the work, lately, has often been so much rushed as to prevent such preliminary inspections.

The principal inspection trips made by me during the past year were to Quebec in April and May last to inaugurate the season's active field work in the lower river; through the Rideau canal route in May to report on an extension of the system of lighting the more intricate stretches by stake lights; to the Georgian bay in June to inspect large repair works required; to the North channel and Lake Superior in August to arrange for new work and report on applications for new aids, and to Detroit in January to arrange for changes in lighting in Lake Erie and Detroit river.

In September I joined Rear Amiral Kingsmill in a tour of inspection of British Columbia waters, when a very thorough examination was made of all localities where aids to navigation had been asked for, where water lots were applied for, and where other interests requiring the care of the Minister of Marine were involved. A large number of reports have been submitted and acted upon.

On this trip Bela Kula was examined for the first time in my many visits to the Pacific coast, and a varied stock of information accumulated respecting many little known localities on the northern portion of the British Columbia coast. Special attention was given to the needs of navigation in the Grand Trunk Pacific terminus of Prince Rupert, and in its approaches from the Pacific through Brown and Edye passages, and all details are now on hand for placing aids to navigation when the completion of the transcontinental road will bring ocean traffic to this new northern port.

Triangle island was visited and selected as the site of a first-class lighthouse and wireless telegraph station, being the last of a line following up the Pacific coast of Vancouver island. It is a most interesting spot, rising 700 feet out of the open Pacific, perfectly bare, with the rocks surrounding the main island swarming with sea lions. The lighthouse to be built on its summit ought to be the most powerful, as it will be one of the highest, in the world.

OFFICE WORK.

A large proportion of the work done by the general staff of the branch consists in the construction, repair or improvement of light buildings, fog-alarms, beacons and other aids to navigation. Full details of the work done in this connection during the past twelve months are contained in a separate report which is attached hereto. (Inclosure A.)

Plans and specifications for all important new buildings and repairs, new vessels, &c., are made or approved in this office.

The following table indicates the work done in the drafting office during the twelve months ended March 31, 1909:—

Description of Work.	Plans Designed.	Plans Received.	Copies Made.
Lighthouse towers and dwellings	32	2	185
Fog alarm buildings	10	1	31
Details	42	10	212
Wharfs, piers, &c.	1	1	9
Outbuildings	3	3	41
Machinery	–	13	25
Lanterns and illuminating apparatus	–	3	2
Buoys and apparatus	–	1	44
Marine hospitals	–	3	2
Steamers	–	5	–
Land surveys	5	26	48
Plans relating to foreshore	1	170	55
Miscellaneous	30	145	255
	124	383	909

Total plans for twelve months from April 1, 1908, to March 31, 1909	1,416
Charts received and recorded	114
Charts received and entered in chart books	17
Photographs received and recorded	347
Specifications written	35
Notices to mariners issued (comprising 321 subjects)	127

PUBLICATIONS.

The work of preparing and issuing notices to mariners continues to be heavy and urgent; during the past twelve months 127 notices, covering 321 subjects, having been published. Amongst important notices, involving considerable labour in compilation, and representing useful work done in the department, are:—

An index to last year's notices; description, plan, sailing directions and list buoys and beacons, Key Inlet, Ont.; description aids to navigation in vicinity of St. Andrews, Passamaquoddy bay, N.B.; hydrographic notes and descriptions of approaches to Prince Rupert, B.C.; position, lights and beacons, North arm, Fraser river, B.C.; and description of islets, shoals, and sailing directions, Brown passage, Chatham Sound, B.C.

During the past twelve months notices relating to waters outside of Canada were issued, covering 14 items relating to Newfoundland and Labrador, 1 item relating to the Atlantic, 15 to the inland, and 4 to the Pacific waters of the United States, as well as 10 notices referring to transatlantic and 3 notices referring to transpacific subjects. No attempt is made to issue a complete synopsis of British or foreign notices, but merely to republish items likely to be of immediate interest to Canadian vessels, or to vessels leaving Canadian ports for the more important or frequented foreign ports.

REMOVAL OF OBSTRUCTIONS.

During the past twelve months the following work has been done, under the annual appropriation for the removal of wrecks and obstructions:—

The schooner *George G. Houghton,* which sank in the month of the Detroit river, about 300 feet north of Bar point lightship, was removed by contract, by the Reid Wrecking Company, Ltd., of Sarnia, Ont., for $1,975.

The schooner *Armenia,* which was sunk, in 1906, off Pelee island, Lake Erie, was removed by contract, by the Midland Towing and Wrecking Company, Ltd., of Midland, Ont., for $5,850.

HYDROGRAPHIC WORK.

The hydrographic surveys of this department are now in charge of Mr. W. J. Stewart, who will make a special report of the year's progress.

All hydrographic notes reaching the department are prepared for publication in this office, and embodied in notices to mariners.

In preparing notices to mariners, special attention has been paid to publishing all information obtainable respecting the hydrography of Canada, and the fullest possible sailing directions have been appended to all descriptions of aids to navigation, so as to increase the value of these notices. During the past twelve months the following hydrographic notes were published:—

Affecting the Atlantic Coast.—Derelict reported in Atlantic ocean; description of buoyage in vicinity of St. Andrews, N.B.; local magnetic disturbance Grand Manan island, N.B.; government survey steamer at work in Northumberland strait; experimental fog signal buoys in Halifax harbour approach, N.S.; description of dredging in St. Mary river, N.S.; depth of Green island bank shoal, N.S.; and uncharted rock reported in Lockeport harbour, N.S.

Gulf and River St. Lawrence.—Publication by department of hydrographic charts, St. Lawrence river, No. 9 (Lake St. Peter); No. 17 (Portneuf to Cap Santé); and No. 18 (Ste. Croix to St. Antoine); buoyage alterations in ship channel between Quebec and Montreal; and hydrographic information respecting Red islet bank.

Inland Waters.—Publication by department of new edition of Canadian list of lights and fog signals; publication by department of hydrographic charts No. 101 (Head of Thunder bay to Pigeon river); and No. 102 (Lamb island to Thunder cape); dates to which lights on great lakes will be kept in operation; description of buoyage in Toronto harbour; uncharted rock reported in St. Clair river; improvements and lighting arrangements Meaford harbour; removal of wreck of *Armenia* off Pelee island, Lake Erie; removal of wreck *George G. Houghton* from Detroit river; construction of tunnel between Detroit and Windsor; description, plan and sailing directions of Key inlet; and local magnetic disturbance in Lake Superior.

Pacific Coast.—Chart issued of southern approaches to Prince Rupert harbour; position of lights and beacons, and alterations to buoyage in Fraser river; description of buoyage, Nanaimo harbour; hydrographic information respecting Khutze arm, middle and north passages, Skeena river and Prince Rupert harbour; description of Stenhouse shoal and Celestial reef; anchorage notes of Bela Kula; and uncharted rocks and shoals reported off Lawn point; Frederick island; Brown passage; Schooner passage; Table island, and Gabriola reefs.

The usual annual edition of the list of lights and fog alarms in the Dominion, corrected up to April 1, 1908, was issued during the summer, with reprints of the portions relating to the Great Lakes and British Columbia bound separately for the use of mariners in those waters. This list has now become so bulky that it ought to be permanently divided into three portions, and printed only in that form.

I took advantage of my visit to British Columbia in the autumn of 1908 to revise and check the list of buoys, beacons and day marks on the Pacific coast, and found so many changes that it was necessary to rewrite the book. The work, which proved exceedingly heavy, was done during the winter, and the manuscript is now in the printer's hands.

I would again draw attention to the fact that there are no lists of buoys of eastern waters published, and that the time has long since passed when complete lists should be in the hands of mariners for their guidance. The work is a very large one, and I fear that our existing staffs are not sufficiently large to overtake it. To prepare correct lists would require the aid of surveyors with special hydrographic training. Lists

have been printed from time to time of the buoys in the more important waterways, but it seems impossible to obtain precise information respecting the smaller harbours where the buoys are maintained under the contract system.

ICE-BREAKING.

The work of ice-breaking in Thunder bay and vicinity was continued during the past year. Contracts for the work were awarded, as in previous years, and the work was carried out in a satisfactory manner.

(1) The Canadian Towing and Wrecking Company, Limited, of Port Arthur, entered upon the second year's term of their three years' contract with the department to keep the harbours of Port Arthur, Fort William and West Fort William open for navigation until December 17, in each year, and to open those harbours each spring in time to admit upward bound vessels to enter the harbours as soon as Sault Ste. Marie canal should be opened for navigation. The contract price is $30,000 per season, which includes an agreement to remove all lightkeepers in the vicinity from their stations at the close of navigation in each year.

(2) A contract was entered into with the Midland Towing and Wrecking Company, Limited, of Midland, to keep the harbours of Midland and Tiffin open until the close of navigation of 1908, for $3,200.

(3) A contract was entered into with Mr. C. E. Pratt, of Parry Sound, to keep the harbours of Parry Sound and Depot Harbour open until the close of navigation of 1908, for $300.

(4) A contract was entered into with Messrs. R. S. Fisher and A. Montgomery, of Collingwood, to keep the harbour of Collingwood open until the close of navigation of 1908, for $300.

In each of the above cases the work was satisfactorily done, under the supervision of the harbour masters of the respective ports.

TIDAL AND CURRENT SURVEY.

This survey, of which Dr. W. B. Dawson is superintendent, has made substantial progress in the tidal branch as well as in the investigation of the currents, and I desire to draw attention in the strongest possible manner to the great practical value to the mariner of the results of the work so ably conducted by this indefatigable officer and his efficient assistants. The work proposed for the summer season was fully carried out. It included the investigation of the currents in Northumberland strait, which is the last extensive area which had not been examined, as well as tidal work at various points of special importance in different regions.

In addition to publications, which are widely distributed, and information sent on request, this survey contributes much assistance to other departments in the government service, and much extra work is done to put information into the special shape required for their purpose. Among the departments thus assisted are the Public Works, the Interior, the Dominion observatory and the Hydrographic branch of the Marine Department.

On the other hand, a quantity of tidal observations taken during surveys made by the Public Works Department or obtained by the hydrographic branch, are worked up by this survey and incorporated in the tide tables where they become available for the use of navigation.

Investigation of the currents.—At this juncture it may be well to sum up concisely what has been accomplished in this branch of the work, in view of the programme originally proposed when the survey was inaugurated, which was the examination of the currents on the leading steamship routes which run so great a distance through Canadian waters before reaching the open Atlantic. This pro-

gramme has now been carried out successfully for practical purposes. Meanwhile the trade of Canada has increased more than 85 per cent the tonnage of ocean-going vessels at our ports having risen from 18,539,534 in 1893 to 34,732,172 tons in 1906. The information obtained has thus become of much greater value than could have been anticipated. The regions examined, with the seasons given to each, may be concisely stated as below, together with the publications that sum up the results, without mentioning the reports of progress in which more detail is given.

Gulf of St. Lawrence. Three seasons of 1894, 1895 and 1896, given to Cabot strait at the entrance to the gulf, the Anticosti region at the mouth of the St. Lawrence and the northeastern angle of the gulf leading to Belle Isle strait. Publication: 'The Currents in the Gulf of St. Lawrence,' describing the currents and explaining the general circulation of the water in the gulf.

Belle Isle strait; part of 1894 and the season of 1906. Publication: 'The Currents in Belle Isle strait,' with a chart and three plates illustrating the character of the current.

The steamship route south of Newfoundland, season of 1903. Publication: 'The currents on the southeastern coasts of Newfoundland and the indraught into the larger bays on the South Coast,' with a general chart and eight plates.

Bay of Fundy. Two seasons of 1904 and 1907, given to the lower part of the bay below St. John, N.B., and the steamship routes in its approaches off southern Nova Scotia. Publication: 'Tables of the Currents in the Bay of Fundy,' giving the direction and velocity of the currents, hour by hour, and the time of slack water throughout the region, and a chart of the currents.

Northumberland strait, in the season of 1908. An examination was made at seven points in the strait, and more specially at the three principal narrows where the current is strongest. The surveying steamer *Gulnare* was employed in this investigation, which was carried on for a month longer than the usual season to obtain more complete information.

In addition to these investigations with the surveying steamer, observations in the Traverse on the lower St. Lawrence were obtained from the lightships; during 1896 and 1897 in the upper traverse and during 1900 in the lower traverse. From these observations tables of slack water are published in the tide tables.

By means of the tidal observations of 1900 in the lower St. Lawrence, the former admiralty determinations of the relation between the turn of the current and the tide were reduced to a practical form by bringing them into relation with the tide tables. Special observations of the turn of the current were also taken at L'Islet and Rivière du Loup to check the results. Observations from the White island lightship, obtained by the Hydrographic Survey in 1907, have been treated in the same way.

In British Columbia observations of the turn of the current in the leading passes and narrows have been taken from shore for not less than one complete year; the periods of observation extending from 16 to 22 months. From these a special method of calculation enables tables of slack water to be published for First narrows, Active pass and Porlier pass.

For Seymour narrows, the only observations are those obtained by the United States Coast Survey in 1897. By calculating tide tables for Port Simpson for that year the relation of slack water to the time of the tide has been determined, which gives the best results yet available.

Tidal observations.—The principal tidal stations on the St. Lawrence and Atlantic coasts, including the new station at Charlottetown, have been maintained in continuous operation throughout the year. The Halifax station has been discontinued, as tidal record for thirteen years in all, has been obtained there, which is considerably longer than for any port in the United States. One tidal station on Anticosti island, commanding the mouth of the St. Lawrence, it has been found possible to dispense with. There will thus be in all seven principal stations in eastern Canada; and for six of these

tide tables require to be calculated; namely, for Quebec, Father Point, St. Paul island, Halifax, St. John and Charlottetown. It will undoubtedly be possible to refer all the harbours of eastern Canada to these stations as ports of reference, as the regions commanded by each station have now been defined sufficiently closely to make this clear. The need for so many principal stations results from the complexity of the tides themselves.

During last season, the following additional information was obtained: On the lower St. Lawrence, at Crane island wharf and L'Islet, above and below the Beaujeu channel; the observations being simultaneous with Quebec. These have afforded a much improved basis for the tide tables for this channel, which is the shallowest point below Quebec. Also, further observations at Tadoussac and at Trois Pistoles, in connection with the hydrographic survey. In the Miramichi region, observations at Chatham and Oak point enable data obtained on public works surveys for Newcastle and other points to be utilized. In Chaleur bay, some further information was obtained. Observations were taken at Georgetown, P.E.I., for the benefit of the winter navigation; and further observations were obtained at Pictou for comparison with the movement of the currents in Northumberland strait. Some preliminary observations were obtained in the upper reaches of the St. John river, which will give an indication of value for future work there.

All these observations were taken by means of registering tide gauges, in continuous operation day and night. Several short periods of tidal observations by the Public Works Department were also worked out; and complete information was obtained regarding their bench marks in New Brunswick. The only set of these observations that proved long enough to be serviceable, was for St. Andrews, N.B.

Tide Tables.—The data for the calculation of the tide tables for the St. Lawrence and the Miramichi region have been completely revised, in view of the further observations obtained. For the tide tables for 1910, two additional tables have been prepared; the turn of the current in the Traverse, and tide tables for Prince Rupert, B.C. Also, the pocket editions for Quebec and St. John have been extended, and a new table showing the arrival of the bore at Moncton has been added, as this is much desired. These pocket editions, which were published chiefly for the convenience of the pilot service, have met with much wider appreciation. The edition of the tide tables has now reached a total of 14,000.

The Great Lakes.—A beginning in observations on the lakes has been made, at the mouth of the Go-home river, on Georgian bay. This work will be supervised by Prof. Loudon of Toronto University without remuneration; a small grant for expenses being made by this survey and some special instruments being provided. The record of the water level in Lake Ontario, as recorded at Toronto by the harbour master, is now forwarded regularly to this survey.

It is not expected that a tide of any practical importance will be found on the lakes; but observations of the amount of wind disturbance will be valuable. The wind occasions a wide oscillation or seiche, which is of importance to shipping; as it affects the depth of the water in harbours during storms, to the extent of several feet in some localities. It is thus a question of the reduction of the available depth and even the grounding of vessels; or on the other hand the flooding of wharfs.

Staff.—The investigations of the currents in Northumberland strait were begun under the personal direction of the superintendent, and were left in charge of Mr. S. C. Hayden with the help of an assistant engaged temporarily, as the observations were continuous day and night. Captain T. G. Taylor, the master of the *Gulnare,* gave valuable co-operation in the work, in addition to his ordinary duties. Mr. H. W. Jones was engaged in the erection and supervision of summer tidal stations. In the winter season, the reduction of the observations and the calculation of the tide tables are made by the same staff; with the addition of Mr. P. M. H. Leblanc, recently appointed.

who assists in the office work. The various members of the staff have often responsible work to do at a distance, in the erection, inspection and repair of tidal stations.

Proposed work.—It is proposed during the coming season to carry forward the tidal investigations in British Columbia, and to obtain further data which are much desired on that coast. In order to leave the staff free for this work, arrangements are being made to utilize the *Gulnare* in the lighthouse service during the coming season; to assist in overtaking the press of work in that branch.

Respectfully submitted,

WM. P. ANDERSON, M. Inst. C.E.,
Chief Engineer.

Chief Engineer's Office,
Department of Marine and Fisheries,
Ottawa, Canada, April 1, 1909.

(Inclosure A.)

DETAILED REPORT OF THE CHIEF ENGINEER OF THE DEPARTMENT OF MARINE AND FISHERIES ON CONSTRUCTION, ESTABLISHMENT AND IMPROVEMENT OF LIGHTHOUSES AND OTHER AIDS TO NAVIGATION UP TO MARCH 31, 1909.

To the Acting Deputy Minister,
Department of Marine and Fisheries,
Ottawa.

Sir,—I have the honour to submit a detailed report on work done in the construction and establishment of aids to navigation for the twelve months ending March 31, 1909.

NOVA SCOTIA.

NEW AIDS TO NAVIGATION.

Amherst Point.—A light was established on the outer end of the government wharf It consists of a Chance anchor lens lantern, elevated on a mast 26 feet above high water, and visible from all points of approach seaward. The work was done by day labour, at a cost of $124.10.

Eatonville.—A small wooden lighthouse was erected near the government wharf in the harbour. The tower is square in plan, with sloping sides, surmounted by a square wooden lantern, the whole painted white. The tower is 22 feet high from its base to the ventilator on the lantern, and the fixed red dioptric, 5th order, light is elevated 24 feet above high water, and is visible six miles from all points of approach seaward. The work was performed by contract, by Mr. A. H. Dyas, of Parrsboro, Nova Scotia, for $675.

Mitchener Point.—A lighthouse was established on the marsh south of the point. It is a wooden tower, square in plan, with sloping sides, surmounted by a square wooden lantern, the whole painted white. It stands on a square cribwork foundation, and is 42 feet high from base to top of ventilator on lantern. The illuminating apparatus is fixed white dioptric, of the sixth order. The tower was erected by contract, by Mr. L. Mury, of West Arichat, N.S., for $2,050.

Parker Cove.—A lighthouse was erected on the government wharf, at a point 57 feet from the outer end. It is a wooden tower, square in plan, with sloping sides, surmounted by a square wooden lantern, the whole painted white; and is 22 feet high from base to top of ventilator on lantern. The light is fixed red dioptric, of the sixth order, visible from all points of approach by water. The tower was erected by contract, by Mr. John P. Rooney, of Granville Ferry, N.S., for $365; and an additional sum of $45 was allowed him for protection work in front of the tower.

Beaver Island.—A 3-inch duplicate low pressure diaphone plant, operated by two 6-H.P. oil engines, was installed in a wooden fog-alarm building, rectangular in plan, on concrete foundations. The plant was purchased from the Canadian Fog Signal Company, Toronto, for $2,424, being the price agreed upon for exchanging an old style for a new style plant. The machinery was installed and building erected by day's labour, at a cost of $3,919.18.

Flint Island.—A 3-inch duplicate diaphone plant, operated by two 12-H.P. oil engines, is being installed in a wooden fog alarm building, rectangular in plan, on concrete foundations. The plant was purchased from the Canadian Fog Signal Company, of Toronto, for $8,100; the fog alarm building is being erected by day's labour, at a cost to date of $3,225.72. In addition to above, a reinforced steel concrete tower will be erected next season.

Pugwash Harbour.—Two sets of range lights were established; one at Biglow point, and the other at Steven point. The range lights at Biglow point, in one, lead into Pugwash road to the intersection of their alignment with that of Steven point range. Both towers are wooden buildings, square in plan, with sloping sides, surmounted by square wooden lanterns, the whole painted white. The lights are fixed white, and are shown from catoptric reflectors. The front tower is 22 feet and the back tower 33 feet high from base to top of ventilator on lantern. The Steven point range lead up, from the intersection of their alignment with that of the Biglow point range, to the turn in the channel to the southward, inside the harbour. Both towers are wooden buildings, square in plan, with sloping sides, surmounted by square wooden lanterns, the whole painted white. The lights are fixed white, catoptric. Each tower is 22 feet high from base to top of ventilator on lantern. The work was done by contract, by Mr. L. Mury, of West Arichat, N.S., for $1,990.

CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

Apple River.—The fog alarm machinery was overhauled and partly renewed, and the old horn was replaced by a diaphone. Two new Robb-Mumford boilers were installed, and a reservoir tank, 20 feet square, built. The work was done by day's labour, at a cost of $752.35.

Brier Island.—It was found that by placing the diaphone above the building, on a level with the whistle much better results were obtained. The room was, therefore, extended up to encase the diaphone, and a heating pipe installed. The work was done by day's labour, at a cost of $326.35.

Cape Fourchu.—A new boiler, purchased from the New Burrell-Johnson Iron Co., of Yarmouth, N.S., for $425, was installed in the fog-alarm building.

Cape Roseway.—The fog-alarm machinery is undergoing repairs, and several of the parts are being renewed. The fog horn engine, recently removed from Cranberry island, was repaired and installed; and the work is being done by day's labour, at a cost, to date, of $300.

Little Hope.—The steel framed concrete dwelling for the lightkeeper, in course of construction last year, was completed, and other improvements carried out. The work was done by day's labour, at a cost of $1,357.97.

Mauger Beach.—Extensive repairs were made; 225 feet of cribwork were renewed on the north side of the lighthouse, and several tons of stone ballast placed as riprap; the plank walk between the tower and dwelling was also renewed. The work was done by day's labour, at a cost of $863.37.

Wedge Island.—About 150 feet retaining cribwork were constructed on southwest side of island, as a protection to the lighthouse tower; the work being done by day's labour, at a cost of $889.53.

Cap la Ronde.—About 400 feet of retaining cribwork were constructed, as a protection to the lighthouse tower. The work was done by day's labour, at a cost of $1,194.67.

Ouetique.—Cribwork protection work was placed around the lighthouse tower; the work being done by day's labour, at a cost of $400.15.

Flat Point.—The lighthouse tower deck was replaced by a new lantern platform, and other changes made to the top framing, to accommodate the new illuminating apparatus. A test is now being made at the station of one of the standard diaphone plants, with a view of deciding on the desirability of installing such a plant in place of the fog whistle now in operation. For this purpose, a temporary building is being erected, and the necessary air compressors and machinery parts installed. The work is being done by day's labour, at a cost to date of $940.83.

McKenzie Point.—The rebuilding of the lighthouse tower, and repairs to lightkeeper's dwelling house in course of construction last year, were completed by day's labour, at a cost of $579.18.

Cape North.—The double dwelling for the fog-alarm engineer and lightkeeper, in course of construction last year, was completed by day's labour, at a cost of $2,321.60.

Margaree.—The lighthouse tower and keeper's dwelling house were practically rebuilt, as the old buildings had become thoroughly dilapidated from age. The work was done by day's labour, at a cost of $1,116.68.

Mabou.—The range mast lights hitherto shown were replaced by permanent towers. The front tower is a wooden building, square in plan, with sloping sides, surmounted by a square wooden lantern, the whole painted white. It is 33 feet high from its base to the ventilator on lantern, and the light is elevated 30 feet above high water. The back tower is a wooden building, square in plan, with sloping sides, surmounted by a square wooden lantern, the whole painted white. It is 47 feet high from base to top of ventilator on lantern, and the light is elevated 44 feet above high water. The buildings were erected by contract, by Mr. E. C. Embree, of Port Hawkesbury, N.S., for $2,450.

Pictou Harbour.—The Fraser Farm range lighthouses were removed to new sites, a distance of about half a mile westerly from the old positions. The towers were replaced on concrete foundations and securely anchored. The work was done by contract by Mr. Jas. Arbuckle, of Pictou, N.S., for $816.

Cape Race.—A new double dwelling for the fog-alarm engineers, in course of construction last year, was completed, and a new storehouse erected. The work was done by day's labour, at a cost of $2,396.82.

St. Paul Island.—A new 3-inch duplicate fog-alarm plant was purchased from the Canadian Fog Signal Company, of Toronto, for $3,594; the price agreed upon for exchanging an old style for a new style plant. This it is proposed to erect in a new building at the north end of the island, and to abolish the present fog-alarm, which is worn out, as soon as the new one is ready to operate.

In addition to the above, minor repairs were executed at the following stations:—

Eddy Point, cribwork repairs	$174.23
George Cape, bracing tower	63 70
Cape d'Or, machinery repairs	107 41
Pubnico, cribwork repairs	256 41

NEW BRUNSWICK.

NEW AIDS TO NAVIGATION.

Fort Monckton.—A lighthouse tower was erected in the old fort near the entrance to Gaspereau river. It is a wooden building, square in plan, with sloping sides, surmounted by a square wooden lantern, the whole painted white. The tower is 33 feet high from base to top of ventilator on lantern, and stands on a square cribwork foundation. The work was done by day labour at a cost of $1,191.52.

Kouchibouguac.—Two sets of pole range lights were erected at the entrance to Kouchibouguac river. The lights are shown from Chance anchor lens lanterns, hoisted on poles, with small sheds at their bases. The front masts are 15 feet and the back masts 25 feet high. The work was done by day's labour at a cost of $764.71.

Peck Point.—The wooden lighthouse tower formerly at Ward point was removed to Peck point. A wooden fog-alarm building was also erected there, and the 1-inch diaphone plant, purchased last year, installed. The building was erected by contract, by Mr. Amos Lawrence, of Sackville, N.B., for $419, and the other work performed by day's labour at a cost of $489.28.

Reid Point.—A mast light was established on the public wharf at this point on the Kennebekasis river. The light exhibited is fixed white, elevated 24 feet above high water, and is shown from a 7th order Chance anchor lens lantern. The work was performed by day's labour at a cost of $59.63.

Richibucto.—Range mast lights were established on the north beach, replacing the inner range formerly maintained on the south beach. The front light is elevated 28 feet and the back light 44 feet above high water, both lights being fixed white. The work was done by day's labour at a cost of $343.59.

Portage Island.—A mast light, to constitute the front light of a range when aligned with the old light, was established on the southern end of the island, and consists of a Chance anchor lens lantern, exhibiting a fixed white light, hoisted on a pole 27 feet high.

LIGHT DISCONTINUED.

Anderson Hollow.—The light formerly shown from the lighthouse tower on the shore north of the government breakwater was permanently discontinued.

CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

Machias Seal Island.—A 50-h.p. Robb-Mumford boiler, purchased from the Robb-Mumford Engineering Company, of Amherst, N.S., for $1,365, was installed; some spare machinery parts were provided, the large reservoir repaired, and the tramway put into good order. The work was done by day's labour at a cost of $996.89.

Gannet Rock.—Considerable damage was done by storm to the tramway, which required to be practically renewed. The fog alarm building was also damaged through the same cause and repaired. The work was done by day's labour at a cost of $775.36.

Swallowtail.—The tramway was repaired; about 75 feet of iron rails and wooden stringers were laid and a concrete bulkhead built at foot of tramway as a protection against storms. The work was done by day's labour at a cost of $601.80.

Head Harbour.—The lighthouse tower was repaired, a new tramway built and the bridge between fog-alarm building and mainland completed by day labour at a cost of $1,764.46.

Passamaquoddy Bay.—Further repairs were made to the St. Andrews east beacon pier. When the sheathing was stripped off the pier was found to be in a very bad condition, there being an absence of tie rods, which necessitated very heavy work in rebuilding. The work was done by day's labour at a cost of $3,405.72.

Wilmott Bluff.—The new wooden lighthouse tower, in course of construction last year, was completed. It is square in plan, with sloping sides, surmounted by a square wooden lantern, and is 42 feet high from base to top of ventilator on lantern. It stands on a cribwork foundation, and was erected by contract by Mr. John C. Palmer, of Kars, N.B., for $1,060.

Cape Spencer.—A new wooden dwelling for the fog alarm engineer was erected by contract by Mr. J. E. Kanes, of St. John, N.B., for $1,840, and a coal and oil shed erected by contract by Mr. E. Rourke, of St. John, N.B., for $340. In addition, 500 feet roadway were constructed between lighthouse and fog-alarm, and repairs made to tower. The roadway and repairs were performed by day's labour at a cost of $835.92.

Letite.—A new boiler, purchased from the New Burrell-Johnson Iron Company, of Yarmouth, N.S., for $580, was installed, and some repair parts for machinery provided.

Buctouche.—About 400 feet of close pilework were built as a protection to the lighthouse tower, and the boathouse moved back to a safer position. The work was done by day's labour, at a cost of $549.39.

Escuminac.—The alterations to the fog alarm building, in progress last year, were completed, and the building resheathed. The work was done by day's labour, at a cost of $571.64.

Miscou.—Repairs and alterations were made to the lighthouse tower, to accommodate the new illuminating apparatus; the work being done by day's labour, at a cost of $757.89.

Little Belledune.—A wooden dwelling was erected for the lightkeeper, the work being done by contract, by Mr. S. Gammon, of Bathurst, N.B., for $1,100.

In addition to the above, minor repairs were executed at the following stations:—

Grindstone island, machinery repairs	$194 19
Lower Caraquet, additions to dwelling	212 06
Pokemouche, repairs	60 00
Shippigan, cribwork repairs	372 85

PRINCE EDWARD ISLAND.

CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

East Point.—A new wooden fog alarm building, rectangular in plan, on concrete foundations, with reinforced concrete chimney, was constructed; and the machinery erected therein, including the installation of two new 25-h.p. boilers, and several new

machinery parts and fittings. The work was done by day's labour, at a cost of $5,072.35.

Panmure Island.—A new dwelling house for the fog alarm engineer is being erected by contract, by Mr. J. M. Clark, of Summerside, P.E.I., the contract price being $1,900.

QUEBEC.

NEW AIDS TO NAVIGATION.

Little Bonaventure.—A light was established three-quarters of a mile eastward of Little Bonaventure river. It consists of a Chance anchor lens lantern hoisted on a pole, 20 feet high, with shelter shed at base. The work was done by contract, by Mr. J. Bujold, of Bonaventure, P.Q., for $127.

St. Godfroy.—A pole light was established on the outer end of the government wharf at this place, about 1 mile eastward of mouth of Nouvelle river; the light is shown from a Chance anchor lens lantern, hoisted on a pole 20 feet high. The work was done by contract, by Mr. S. Grenier, of St. Godfroy, P.Q., for $103.

Cap Anguille.—The reinforced steel concrete tower, and wooden fog alarm building, in course of construction last year, were completed, and the 5-inch diaphone plant installed. A large coal shed and boathouse were also erected, and other improvements executed. The work was performed by day's labour, at a cost, this year, of $6,941.91.

Cape Dogs.—It is the intention to erect, during the coming season, a reinforced steel concrete lighthouse tower, wooden fog alarm building, and double dwelling house. To expedite the hauling of materials, &c., from a very difficult landing place, roadways were blasted from the shore to the sites, and an inclined railway constructed on trestle-work. A power-house, for running trams and derrick, was erected, and a concrete wall built at the month of a large gorge, to permit the gathering of fresh water when required. In addition, some of the material for fog-alarm building was purchased, as also the machinery for running the fog alarm plant. The work is being done by day's labour, and the expenditure to date is $6,433.64.

Crane Island.—The 5-section steel lighthouse tower, in course of construction last year, was completed. (See illustration.) It is square in plan, with sloping sides, surmounted by a wooden watchroom, and an octagonal iron lantern. The tower is 90 feet high from base to top of ventilator on lantern. The old tower was cut down to one story, and capped by a pyramidal roof, to be used as one of the series of telephone stations now being established in ship channel. The new tower was purchased from the Goold, Shapley, Muir Co., of Brantford, Ont., for $1,184, and was erected by day's labour; the expenditure this season being $2,055.18.

Ste. Anne de Beaupré.—The two range lighthouse towers, in course of construction last year, were completed. They are wooden buildings, square in plan, with sloping sides, surmounted by square wooden lanterns, each tower being 32 feet high from base to top of ventilator on lantern. The work was done by day's labour, at a cost this season of $268.93.

St. Pancras Point.—A combined lighthouse and keeper's dwelling house was established. It is a square wooden building with an octagonal wooden lantern rising from the middle of its hip roof, and is 37 feet high from base to top of ventilator on lantern. The light is fixed white dioptric, elevated 82 feet above high water, and visible 14 miles. A storehouse, shed and landing wharf were also erected; the work being done by day's labour, at a cost of $6,139.30.

LIGHT DISCONTINUED.

Cap Charles.—The old lower back pole light was permanently discontinued.

CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

Belle Isle (N.E. end.)—The cast-iron lighthouse tower was reinforced in concrete, and further strengthened by concrete flying buttresses. A large coal and oil shed was built, and hot air furnaces installed in the lightkeepers' dwelling houses. The work was done by day's labour, and the expenditure was $8,550.56.

Belle Isle (S.W. end).—The wooden lighthouse tower, from which the low light was shown, was taken down; the old foundation raised 3 feet, and a new circular metal lantern placed thereon. The fog alarm machinery will be improved by the installation of a 12-H.P. Fairbanks-Morse kerosene engine, triplex pump, Clayton compressors, and other machinery parts, which were purchased from the General Supply Co. of Canada, Ltd., of Ottawa, Ont., for $1,596. A coal and oil shed was also built, and foundations prepared for the new fog alarm building to be erected next season. The work was done by day's labour, at a cost of $6,995.75.

Cape Bauld.—The new circular cast-iron lighthouse tower, in course of construction last year, was completed, and the illuminating apparatus placed thereon. A new brick chimney was added to lightkeeper's dwelling house, and minor repairs made to the fog alarm building. The work was done by day's labour, at a cost of $3,255.32.

Cape Norman.—The new double dwelling for the lightkeeper and fog alarm engineer, in course of construction last year, was completed. The old lighthouse tower was razed to the first floor and converted into a storehouse; the fog alarm reservoir was repaired and the building drained. The work was done by day labour, at a cost of $6,008.72.

Point Rich.—It was found necessary, in order to carry the new heavy illuminating apparatus, to build concrete foundations, on which wooden framework was erected, and carried up all around the outside of the lighthouse tower. The old lantern platform was then removed and new wall plates, &c. laid. A wooden dwelling for the lightkeeper was also erected. The work was done by day's labour, at a cost of $8,170.05.

Cape Ray.—Repairs were made to the lightkeeper's dwelling house, and a wooden fence constructed around it. The foundations of the coal shed were strengthened, and a trench dug to drain water from fog alarm building. The work was done by day's labour, at a cost of $2,166.11.

Bird Rocks.—The lighthouse tower was reinforced in concrete and increased 12 feet in height, to clear the obstruction caused by the new fog alarm building. An oil shed, blacksmith shop, and stables were also erected; the work was done by day's labour, at a cost of $4,493.61.

Heath Point.—The lighthouse tower was increased 30 feet in height, in reinforced concrete, and the extension sheathed in wood. The height of the tower is now 133 feet from base to top of ventilator on lantern. The work was performed by contract, by The Steel Concrete Company, of Montreal, for $6,095. The tower was hardly completed, however, when a heavy storm damaged the greater part of the sheathing on the old portion of the building, which necessitated resheathing and repainting the tower. The tower was further strengthened by fastening the concrete and stonework together by iron hoops. The repairs and improvements were carried out by contract, by the Steel Concrete Company, of Montreal, for $2,350.

Cape Rosier.—The lightkeeper's dwelling house was thoroughly repaired, and water piping laid; the work being done by day's labour, at a cost of $2,403.17.

Cape Magdalen.—The new 3-inch diaphone plant, purchased last year, was installed, and replaces the fog whistle formerly in operation. The work of installation was performed by day's labour, at a cost of $1,218.99.

Rivière à la Martre.—The lightkeeper's dwelling house was thoroughly repaired, and a new coal and oil shed erected. The work was done by day's labour, at a cost of $1,691.92.

Father Point.—A new lighthouse tower was erected. It is a reinforced concrete structure, octagonal in plan, reinforced by eight flying buttresses, and surmounted by a circular metal lantern. The tower is 97 feet high from base to vane on lantern, and the light is elevated 91 feet above high water, and visible fifteen miles from all points of approach seaward. The tower was erected by day's labour, at a cost of $5,855.58.

Bicquette.—A new wooden fog-alarm building, rectangular in plan, was erected, and a 3-inch duplicate diaphone plant installed, which supersedes the steam horn formerly in operation. The diaphone plant was purchased from the Canadian Fog Signal Company, of Toronto, for $8,500; the fog-alarm building being erected, and the machinery installed by day's labour, at a cost of $6,662.41, which amount also includes repairs to the lightkeeper's dwelling house.

River Valin.—Two range lighthouse towers were erected, to take the place of masts formerly used to carry lights. The front tower is a wooden building, square in plan, with sloping sides, surmounted by a square wooden lantern, and is 32 feet high from base to top of ventilator on lantern. The back tower is a 4-section steel skeleton structure, square in plan, with sloping sides, surmounted by an enclosed wooden watchroom and square wooden lantern. It is 64 feet high from base to top of ventilator on lantern. The front tower was erected by contract, by Mr. N. Warren, of Chicoutimi, P.Q., for $570. The back tower was purchased from the Goold, Shapley, Muir Company, of Brantford, Ont., for $540, and erected by day's labour, at a cost of $1,546.68, which includes cost of cutting trees and clearing land around front lighthouse.

Pilgrims.—A new dwelling house was erected for the lightkeeper, the work being done by day's labour, at a cost of $3,534.62.

In addition to the above, minor expenditures were incurred at stations as follows:

Brandy Pots, building shed	$272 05
Pte. à Bastile, tower repairs	358 12
Domaine, payment for sites, &c	212 30
Hospital Rock, for sites, &c	163 69
Little Metis, repairs	341 99

MONTREAL AGENCY.

LIGHT DISCONTINUED.

Ile à la Pierre.—The light formerly maintained on the pier was permanently discontinued.

CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

Batiscan.—The range lights were moved to new positions, in the axis of the widened and improved channel. A new concrete pier was constructed for the front light. It is 40 feet square at bottom, with battered sides, and is surmounted by a small octagonal iron lantern. A new 3-section steel skeleton tower was provided for the back light. It is square in plan, with sloping sides, surmounted by an inclosed wooden watchroom and square wooden lantern. It is 62 feet high from base to top of ventilator on lantern. The work was done by day labour, at a cost of $9,832.26.

Port St. Francis.—The steel skeleton tower, from which the back range light is shown, in course of construction last year, was completed by day's labour, at a cost this season of $1,110.97.

No. 2 Curve, Lake St. Peter.—The rebuilding of piers, which was in progress last year, was completed. Both piers were strengthened by reinforced concrete and steel bars, and a concrete nosing built on upstream end of back pier; a large quantity of stone ballast being filled in around them. The middle pier was rebuilt in concrete to a height of 8 feet above low water, and stone ballast filled in around it. Cast-iron anchor locks were sunk in cement for holding anchors of steel tower which will be erected during the coming season. The work was done by day's labour, at a cost during the present season of $74,080.46.

Gallia Bay.—Owing to the soft bottom at the sites, the front and back piers of the upper range and the front pier of the lower range settled unevenly. Pilework was driven in around them, the old concrete work picked and reinforced with steel bars, a reinforced concrete belt, 2 feet thick, placed around pilework, and heavy boulders piled around outside of all, to act as a further protection. The work was done by day's labour at a cost of $6,775.58.

Ile de Grace.—The water having undermined the front pier, pilework was driven around it and riprap placed between piles. The work was done by day's labour at a cost of $537.30.

Ste. Anne de Sorel.—The water having undermined the front pier, pilework was driven around it and riprap placed between piles. The work was done by day labour at a cost of $1,193.35.

Sorel.—Water piping and fixtures were laid from the water works to the government wharf and buildings, the work being done by contract, by Mr. W. Coté, of Sorel, P.Q., for $1,290.

Ile Deslauriers.—A new 4-section steel skeleton tower was erected to replace the back range tower of this range, on the eastern shore of Ile Ste. Thérèse, for the purpose of increasing the difference in height between the front and back light. It is square in plan, with sloping sides, surmounted by an inclosed wooden watch-room and square wooden lantern. The tower is 82 feet high from base to top of ventilator on lantern, and was purchased from the Goold, Shapley & Muir Company, of Brantford, Ont., for $668.50. It was erected by day's labour at a cost of $704.76. The old three-section tower has been taken down and will be utilized elsewhere.

Ile à la Bague.—The old octagonal wooden lighthouse tower was pulled down and a new two-section steel skeleton tower erected. It is square in plan, with sloping sides, surmounted by an octagonal wooden lantern, and stands on a square concrete pier with battered sides. This tower was formerly in use at Port St. Francis and is designed for removal every winter. The work was done by day labour at a cost of $1,107.60.

Varennes.—The concrete wall supporting the steel tower of the back light became unstable, seriously endangering the stability of the tower. Temporary repairs were, therefore, carried out to hold the tower sufficiently until next season, when repairs of a more permanent character will be executed. The work was done by day's labour at a cost of $946.95.

In addition to the above, minor repairs were executed at the following stations:—

Guard pier, shelter shed	$ 84 39
Ile aux Raisins, repairs to dwellings	66 00
Lake St. Peter lightship, repairs	96 64
Pointe du Lac, purchase of site	75 00
Repentigny, repairs to back tower	183 75

ONTARIO.

NEW AIDS TO NAVIGATION.

Rideau Canal.—Lights and day beacons were established on several stretches of the Rideau canal, as follows: 20 lights on River Styx, 10 above Poonamalee, and 4 at Chaffey lock, 13 tripod day beacons below Catchall island, and 4 at Mud island. The lights are exhibited from hand lanterns hung inside tripods at an elevation of from 4 to 6 feet above the water. The lanterns on the starboard hand show fixed red lights, and those on the port hand fixed white, visible at least half a mile in all directions except where obscured by the legs of the tripods. The tripods consist of cedar poles driven in shallow water, with the heads bound together. The tripods were supplied by contract by the Rideau Lakes Navigation Company, Ltd., of Kingston, Ont., for $1,942.25, which amount included the placing of the lights in their proper positions.

Port Stanley.—A reinforced steel concrete tower is in course of erection on the government breakwater, the work being done by contract by Mr. F. R. Miller, of Port Stanley, Ont., for $3,850.

Chenal Ecarté.—Two range lights were established on the northern end of Walpole island to lead into this channel. The lights are fixed white, shown from pressed lens lanterns hoisted on poles. The front pole is 8 and the back pole 20 feet high, with small shed attached. The work was done by day's labour at a cost of $248.46.

Flowerpot Island.—A fog-alarm was established at this light station. It consists of a 4-h.p. standard 1½-inch diaphone plant, purchased from the Canadian Fog Signal Company, of Toronto, for $2,400. A rectangular wooden fog-alarm building was erected by day's labour, and, with the installation of machinery, cost $2,010.65.

Hope Island.—The 3-inch duplicate diaphone plant, purchased last year, was installed by day labour, at a cost of $1,647.40.

Parry Sound.—The departmental wharf for the storing of buoys, &c., and berthing of government steamers, in course of construction last year, was completed, the work being done by contract, by Messrs. Pratt & McDougall, of Midland, Ont., for $39,700. In addition to above, the ground alongside the departmental agency building was filled in, the work extending some 50 feet into the water, and a small railroad track laid for the purpose of transporting material about the wharf and store. The work was done by day labour at a cost of $6,046.58.

Spruce Shoal.—The reinforced concrete beacon, in course of construction last year, was completed, the work being done by contract, by Mr. T. A. White, of Parry Sound, Ont., for $13,373.38. The beacon is octagonal in plan, sloping up from the water to a central tower which holds a gas tank surmounted by a small steel frame with lens lantern; the height of gallery of tower above water is 21 feet.

Point Porphyry.—The installation of the new 3-inch duplicate diaphone plant with two 6-h.p. kerosene engines was completed by day's labour at a cost of $294.84.

Welcome Islands.—The new 1½-inch diaphone plant was installed by day's labour, at a cost of $402.85.

LIGHTS DISCONTINUED.

Britannia.—The light formerly maintained on the Electric Railway Company's pier was permanently discontinued.

East Neebish.—The upper range lights formerly maintained in the eastern channel of River St. Mary were permanently discontinued.

Footes Dock.—The fixed red light formerly maintained on this dock was permanently discontinued.

Goderich.—The fixed green light formerly shown on the north pier was permanently discontinued.

Meaford.—The fixed white light formerly shown from a lantern on a pole, on outer end of east pier, was permanently discontinued.

Weller Bay.—The back range light, at southwestern end of Quinte carrying place, was permanently discontinued.

CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

Nine-Mile Point.—Alterations were made to the fog alarm boiler room to accommodate an extra 25-h.p. Robb-Mumford boiler, which was installed. A reinforced concrete chimney was erected at the fog alarm building; repairs made to breakwater, and drainage improvements executed to dwelling house of fog alarm engineer. The work was done by day's labour, at a cost of $2,108.11.

Pigeon Island.—The old combined lighthouse and dwelling was pulled down and replaced by a specially designed 4-section steel skeleton tower, and a separate dwelling. The new tower is square in plan, with sloping sides, surmounted by an inclosed wooden watchroom, and has a spiral staircase, inclosed in cylindrical steel form, constructed from base of tower to watchroom floor. The new dwelling house is a neat wooden building. A new boathouse was also built, as well as cribwork protection work. The steel tower was purchased from the Goold, Shapley & Muir Co., of Brantford, Ont., for $1,677, and the construction work was carried out by day's labour at a cost of $3,591.84.

Wicked Point.—Two hundred feet of cribwork was constructed at the northwest end of breakwater, and the breakwater repaired. Minor repairs were also executed to lighthouse tower and keeper's dwelling. The work was done by day's labour at a cost of $788.95.

Toronto.—A wooden dwelling house was erected for the fog alarm engineer at the East gap station; the work being done by contract, by Messrs. J. D. Young & Son, of Toronto, for $3,295.78. Protection work was also executed at the east breakwater to ensure the safety of the fog alarm building. The work was done by day's labour, at a cost of $214.75.

Port Dalhousie.—The back light pier was repaired and foundations of lighthouse tower renovated. The work was done by day labour, at a cost of $801.25.

Port Colborne.—The interior of the fog alarm building was sheathed, and a wooden floor laid; an oil shed was erected, and some machinery fittings supplied to the fog alarm plant. The work was done by day labour, at a cost of $713.98.

Stag Island.—A lighthouse tower was erected on the southern end of Stag island shoal, replacing the pole light formerly exhibited. It is a wooden building, square in plan, with sloping sides, surmounted by a square wooden lantern, and is 22 feet high from base to top of ventilator on lantern. The tower stands upon a reinforced concrete pier, square in plan, with battered sides. The work was done by day's labour, at a cost of $3,403.06. (See illustration.)

Goderich.—The pole and lantern from which the back range light was formerly exhibited were replaced by a 3-section steel skeleton tower. It is square in plan, with sloping sides, surmounted by an inclosed wooden watchroom and square wooden lantern, and is 64 feet high from base to top of ventilator on lantern. The tower was purchased from the Goold, Shapley & Muir Co., of Brantford, Ont., for $502.80,

and was erected by day's labour, at a cost of $686.11. An oil shed was also erected by day's labour, at a cost of $97.54.

Cabot Head.—The fog alarm building and plant were destroyed by fire, in August, 1907. A new wooden rectangular fog alarm building was, therefore, erected, and a duplicate 12-h. p. 3-inch diaphone plant, purchased from the Canadian Fog Signal Company, of Toronto, for $8,100, installed. The fog alarm building was erected by contract, by Mr. J. C. Kennedy, of Owen Sound, Ont., for $2,463.

Cape Croker.—A new lighthouse tower was erected. It is an octagonal reinforced concrete structure, surmounted by a circular metal lantern, and is 53 feet high from base to vane on lantern. The work was done by contract, by The Forest City Paving and Construction Company, of London, Ont., for $1,820.

Owen Sound.—Two new range lighthouse towers were erected, both towers being steel skeleton structures, square in plan, with sloping sides, surmounted by inclosed wooden watchrooms and octagonal iron lanterns. The front tower is 50 feet high from base to top of vane on lantern, and was formerly in use at Point au Baril. The back tower (see illustration) is 82 feet high from base to top of vane on lantern, and was purchased from the Goold, Shapley, Muir Company, of Brantford, Ont., for $668.50. The towers were erected by day's labour, at a cost of $1,637.86.

Point au Baril.—The old back lighthouse tower was taken down and removed to Owen Sound, where it now forms the front tower of that range. It was replaced by a new 4-section steel skeleton tower, square in plan, with sloping sides, surmounted by an inclosed wooden watchroom and square wooden lantern, and has the side of the framework facing the channel covered with wooden slatwork. The lantern is painted white; and the watchroom and slats are painted white with a vertical black stripe on the front face. The height of the tower from its base to the ventilator in the lantern is 81 feet. The fixed red catoptric light is elevated 93 feet above the water, and should be visible ten miles. The work was done under contract by Mr. Geo. W. White, of Parry Sound, at a cost of $570. The steel framework of the lighthouse was provided under contract by the Goold, Shapley, Muir Company, of Brantford, for $668.50. The total cost of the work to date was $1,237.

The higher tower was erected here because it was difficult to see the old light when approaching outside the reefs lining the channel in from Georgian bay, and a higher light could be seen over the point of woods and more easily aligned with the front light.

Sailors Encampment.—The two range mast lights were replaced by inclosed wooden towers, square in plan, with sloping sides, surmounted by square wooden lanterns, each tower being 33 feet high from base to the top of ventilator on lantern. The work was done by day's labour, at a cost of $1,686.71.

Coppermine Point.—A new lighthouse tower was erected, replacing the lantern on open framed pyramid formerly exhibited. It is a wooden building, square in plan, with sloping sides, surmounted by an octagonal iron lantern, and is 32 feet high from base to top of ventilator on lantern. The tower was erected by contract, by Mr. J. C. Kennedy, of Owen Sound, Ont., for $1,200.

In addition to the above, minor repairs were executed at the following stations:—

Buckom Point, new pier	$350 00
Collingwood, boathouse	317 58
Fort William, temporary pole lights	322 02
Lonely Island, tower repairs	351 16
Port Burwell, tower repairs	113 62

Red Rock, tower repairs	243 66
Thessalon, oil store	212 79
Victoria Island, tower repairs	284 30
West Sister Rock, repairs to dwelling	298 94
Thames River, boathouse	250 00
Shoal Point, tower repairs	197 51

BRITISH COLUMBIA.

NEW AIDS TO NAVIGATION.

Estevan Point.—A 5-inch duplicate 12-horse-power diaphone plant, purchased from the Canadian Fog Signal Company, of Toronto, for $12,500, was installed in the new fog-alarm building erected last year. A 100-foot reinforced steel concrete lighthouse tower will be erected next season, and a portion of the steel and other material for this have already been purchased. The work is being done by day's labour, and the expenditure this year, exclusive of cost of diaphone plant, was $5,833.35.

Cape Beale.—The 3-inch duplicate diaphone plant, purchased last year, was installed, the work being done by day labour, at a cost of $523.44.

West Coast Trails.—Last year a special appropriation was made in the departmental estimates for establishing and maintaining life saving stations and constructing a pack-horse trail along the west shore of Vancouver Island, between Barkley sound and Port San Juan, and about twenty-two miles of trail were completed. This year the work was continued and the trail extended a farther distance of about eight miles. Owing to the great depth of vegetable matter lying under several portions of the trail cut last year, the road became so soft in places during wet weather that pack horses were unable to travel over it. The trail was, therefore, gone over again, and, wherever necessary, an extra bedding of brush and gravel was laid to remedy the defect. The route of the trail follows the coast line generally, but occasionally strikes off inland where necessary to avoid rocky country or ground over which a trail could not be constructed. The work is being done by day's labour, and the total expenditure to date has been $93,446.65.

Scarlett Point.—A fog-bell was established. It is suspended in a small wooden tower which was erected by day's labour, at a cost of $269.75.

Ivory Island.—The installation of the 1½-inch diaphone plant was completed, and several extra fittings and spare parts supplied; the work being done by day's labour, and the total expenditure being $2,222.39.

Gas-lighted Beacons.—Gas-lighted beacons were established by the Commissioner of Lights' Branch at the following places:—(1) Look-out Island, Halibut channel; (2) Helen point, Mayne island; (3) Walker rock, Trincomali channel; (4) Coffin islet, Oyster harbour; (5) First Narrows, Burrard inlet; (6) White islet, Seechelt peninsula; (7) Ragged island, Lund; (8) Chatham point, Discovery passage. These beacons consist of steel cylindrical tanks, standing on steel framework, surmounted by pyramidal steel frames supporting lanterns. The illuminant is acetylene, generated automatically, and the lights are unwatched lights. No special account was kept of the actual cost of each of these beacons, as the labour on them was performed by the crews of the C.G.S. *Quadra* and the hired steamer *Cascade,* as opportunity offered, and took a longer or shorter time as local conditions prevailed. The cost is, therefore, partly included in the payments made for the steamer *Cascade* and in the wages of the crew of the *Quadra,* but the cost of the materials used in the construction of these beacons was $1,623.44.

CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

Lennard Island.—Repairs and improvements were executed to the fog-alarm building; the work being done by day's labour, at a cost of $742.58.

Trial Island.—A new lantern platform was erected on the light house tower and an improved lantern erected, the work being done by day's labour at a cost of $356.64.

In addition to the above, minor repairs were executed at the following stations:—

Ballenas Islands, machinery fittings	$51 22
Pine Island, clearing land	60 00
Sisters Island, machinery fittings	51 22
Yellow Island, machinery fittings	51 22

The whole respectfully submitted.

WM. P. ANDERSON, M. Inst. C.E.,
Chief Engineer.

Chief Engineer's Office,
Department of Marine and Fisheries,
Ottawa, Canada, April 1, 1909.

APPENDIX No. 2.

ANNUAL REPORT OF THE COMMISSIONER OF LIGHTS BRANCH.

To the Acting Deputy Minister of Marine and Fisheries,

SIR,—I have the honour to submit the sixth annual report of this branch. The principal work performed has been the substitution of modern dioptric apparatus in a number of major coast lights, the improvement of minor coast lights by the installation of petroleum vapour as an illuminant, an extension of the gas buoy and beacon service throughout the various provinces and the maintenance of lights and other aids to navigation throughout the Dominion, together with the installation of what new apparatus was required at new stations.

The gas buoys and beacons have given general satisfaction. Two losses have occurred with regard to gas buoys, one in New Brunswick and one in Ontario. In the New Brunswick district, a No. 11 gas and whistling buoy, serial No. 575, which was stationed at Northwest Ledge, Brier island, broke from its moorings and drifted ashore. The lantern and superstructure were saved, but the buoy sank in three fathoms of water. It is hoped that the buoy can be recovered and repaired. In Ontario a No. 11 gas whistling buoy, serial No. 569, which was stationed at Lone Rock, Georgian bay, disappeared during a storm on November 15, 1908, and has not been recovered.

The submarine bells have given excellent service. When these aids to navigation were first established, some difficulty was experienced in obtaining a serviceable bell, but an improved type of bell was established in the summer of 1907. These bells have been in service since that time and have not required any attention though the submarine cable leading to one of the bells at Negro Head, N.B., failed. This cable will be raised and repaired as soon as weather permits. Four shore stations are in operation—Negro Head, Yarmouth, Chebucto Head and Louisburg—and five lightship stations—Lurcher, Anticosti, White island, Red island and Prince Shoal.

In the Nova Scotia agency the *Lady Laurier* and *Aberdeen* have been in use in connection with the lighthouse and buoy service. The buoys on the Bay of Fundy coast of Nova Scotia, from Cape Sable inward, are under the control of the New Brunswick agency.

In the New Brunswick agency, it has not yet been possible to provide a permanent base of operations but it is hoped that this will be accomplished in the near future. Owing to the large amount of work to be carried out, it was necessary to utilize the services of the chartered steamer *Restigouche* for some time in connection with buoy work.

In the Prince Edward Island agency the C.G.S. *Brant* is useful in delivering lighthouse supplies, but is not large enough to handle the larger buoys. The gas buoys were placed in the spring by the *Stanley* and raised in the fall by the *Aberdeen.*

In the Quebec agency facilities for handling lighthouse supplies and buoys are satisfactory. The whistling buoy and bell buoy at the Magdalen islands, which have hitherto been under the control of the Quebec agency, have been put under the care of the Prince Edward Island agency, and a suitable derrick has been erected on the government wharf at Grindstone island for the purpose of handling the buoys.

The Dominion lighthouse depot at Prescott still continues to be an establishment of great usefulness. From the depot is administered the buoy service between Montreal and Kingston. The depot is also a distributing point for apparatus throughout the Dominion, likewise a manufacturing centre for lighthouse apparatus of a special nature. Photometric and other tests are performed from time to time in order to

determine the usefulness of new apparatus or to establish a comparison between various types of apparatus. In connection with the experimenting and manufacturing work, an important advance has been made in the development of a revolving mercurial joint, which makes possible the use of petroleum vapour as an illuminant in conjunction with revolving reflectors. By this means a light of as high power as 48,000 candles can be manufactured at a moderate cost. See plates 1 and 2. Plate 1 shows an elevation of a high power catoptric revolving light in a lantern 10 feet diameter. This arrangement has been rendered successful by the use of the high pressure frictionless mercurial joint shown in plate 2. This revolving joint differs entirely from the familiar mercury seal in that it consists of a series of annular cells containing mercury, the pressure being transmitted outward from one cell to the next through the medium of another liquid of low specific gravity (oil) until the pressure is reduced to atmospheric. A 'six-series' joint, two feet long, is approximately equivalent to an ordinary mercury seal 12 feet long.

The work in the Parry Sound agency consists particularly in the maintenance of the gas buoys and acetylene lights on the Georgian bay. The service is handled by the aid of a derrick scow and chartered tug. The construction of a suitable steamer for this agency is nearing completion in England and it is expected that she will reach Parry Sound in the course of two months. This steamer will be available for handling lighthouse supplies for the Ontario district. Hitherto these supplies have been delivered by chartered vessels..

In the British Columbia agency, there has been considerable development. Hitherto only one vessel, the C.G.S. *Quadra,* has been available and owing to the extensive coast line has proved entirely inadequate. For this reason, it was necessary to charter other vessels for various periods of time. The derrick scow is a useful auxiliary and especially so now that the *Newington* has been purchased for service in this agency. By reason of the extensive coast line and the rapidly increasing service, the day is not far distant when it will be necessary to add another steamer to the department's fleet in British Columbia.

Please find herewith inclosures as follow:—

Inclosure 1. Statement by provinces showing new aids to navigation established throughout the Dominion, also improvements effected in existing lights in the fiscal year 1908-9.

Inclosure 2. Statement by provinces showing the number of lightstations, lights, fog alarms and warning buoys in service during the fiscal year 1908-9.

Inclosure 3. Statement by divisions showing the number of gas buoys in service throughout the Dominion during the fiscal year 1908-9.

Inclosure 4. Statement giving complete list of stations at which gas buoys were in operation throughout the Dominion during the fiscal year 1908-9.

Inclosure 5. Outline chart Atlantic coast of Canada showing quick flashing lights of the hyper-radial, 1st order, 2nd order, 3rd order, 3rd order small model and 4th order in operation during the fiscal year 1908-9.

In conclusion, I desire to express and record my appreciation of the able assistance rendered by my staff and the untiring application to duty exhibited by each member. It would not have been possible to carry out the large and increasing amount of work which is devolving upon this branch without the co-operation of all the officers connected with it.

I have the honour to be, sir,
Your obedient servant,

J. G. MACPHAIL,
Acting Commissioner of Lights.

Commissioner of Lights Office,
Department of Marine and Fisheries, Canada.

March 31, 1909.

INCLOSURE NO. 1.

Statement by provinces showing new aids to navigation established throughout the Dominion, also improvements effected in existing aids during the fiscal year 1908-9.

NOVA SCOTIA.

New Lights.

Amherst Point.—360° 5th order French lens with brass stand and ring, duplex lamp.

Biglow Point, Pugwash Harbour, Front Light.—240° Chance lens with brass plate and support and Diamond gas automatic occulting machine.

Biglow Point, Pugwash Harbour, Back Light.—Constant level lamp with 20-inch silvered copper reflector.

Eatonville.—5th order 360° French lens with brass stand and ring and duplex lamp.

Maitland.—360° Chance anchor lantern.

Mitchener Point.—360° 5th order French lens with brass stand and ring, duplex lamp.

Stevens Point, Pugwash Harbour, Front Light.—Constant level lamp and reflector.

Stevens Point, Pugwash Harbour, Back Light.—Constant level lamp and 20-inch silvered copper reflector.

Improvements.

Beach Point, Pubnico Harbour.—A 4th order dioptric occulting white light and new lantern, visible for six seconds and eclipsed for four seconds, alternately, has been substituted for the fixed white, 7th order dioptric light. The illuminant is petroleum vapour burned under an incandescent mantle.

Cape Fourchu.—A 2nd order dioptric single flashing light and lantern, giving one flash every two and one-half seconds, thus:—

Flash	·25	seconds.
Eclipse	2·25	"

replaces the revolving white catoptric light. The illuminant is petroleum vapour burned under an incandescent mantle. Candle power 270,000.

Cape George, Northumberland Strait.—The Catoptric revolving white light has been discontinued and replaced by a third order dioptric triple flashing light having the following characteristic:—

Flash	·25	seconds.
Eclipse	1·00	"
Flash	·25	"
Eclipse	1·00	"
Flash	·25	"
Eclipse	4·75	"

The total period being 7·50 seconds. The illuminant is petroleum vapour burned under an incandescent mantle. Candle power, 55,000.

Little Hope.—A 2nd order dioptric double flashing light and lantern has been erected in the new tower, replacing the dioptric 6th order occulting white light which

was placed temporarily. The light is flashing white, having the following characteristic:—

Flash	·4 seconds.
Eclipse	1·6 "
Flash	·4 "
Eclipse	7·6 "

The illuminant is petroleum vapour burned under an incandescent mantle. Candle-power 270,000.

St. Paul's Island, S.W.—A 55 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp.

Sambro.—An 85 mm. Chance vapour installation replaces the acetylene light.

Low Point, Sydney Harbour.—The fixed white catoptric light has been replaced by a 3rd order double flashing light and lantern, showing two bright flashes of ·25 seconds duration. separated by an eclipse of ·75 seconds, followed by an eclipse of 3·75 seconds, the total period being 5 seconds, thus:—

Flash	·25 seconds.
Eclipse	·75 "
Flash	·25 "
Eclipse	3·75 "

The illuminant is petroleum vapour burned under an incandescent mantle. Candle power, 100,000.

Westport.—The catoptric fixed white light has been replaced by a 5th order 360° Chance lens and 25 mm. Diamond vapour installation with brass and iron stand.

Wilmot Bluff.—A 5th order fixed white light supersedes the old catoptric light.

Gas Buoy Services.

The following new buoys have been placed:—

Low Point, Liverpool Harbour.—Gas and bell buoy.

Pubnico.—Gas and whistling buoy.

Shelbourne.—Gas and whistling buoy.

Sydney.—Gas and whistling buoy.

South East Bay, Sydney Harbour.—Gas buoy.

Other Aids to Navigation.

Berry Head.—Hand fog horn.

Bon Portage Island.—The bell buoy hitherto maintained at this point has been superseded by a whistling buoy.

Horseshoe Ledge, St. Margaret Bay.—Bell buoy established.

Fishery Point, Sheet Harbour Passage.—Bell buoy established.

Kingsport.—Hand fog horn.

Lockwood Rock, South Coast.—Whistling buoy.

McMillan Point.—Hand fog-horn.

Mad Dick Shoal, Main-à-Dieu Bay.—A bell buoy replaces the steel conical buoy heretofore moored at this poiut.

Malone Shoal, Spry Bay.—Iron can buoy.

Mad Moll Reef, Spry Bay.—Iron conical buoy.

Musquodoboit Shoal, off Harbour Island.—Whistling buoy. Iron can buoy has been established half- mile s. 62 w. from Harbour island.

Nixonmate Shoal.—Bell buoy.

Port Latour.—Fairway bell buoy.

Stonehouse.—Iron can buoy.

NEW BRUNSWICK.

New Lights.

Fort Moncton.—7th order 240° Chance lens and brass stand with duplex lamp.

Kouchibouguac Ranges.—Front light, anchor lantern; back light, anchor lantern; front light, anchor lantern; back light, anchor lantern.

Portage Island.—240° Chance anchor lantern.

Reid Point.—240° Chance anchor lantern.

Richibucto, Front Light.—180° Chance anchor lantern.

Richibucto, Back Light.—180° Chance anchor lantern.

Improvements.

Escuminac.—A 55 mm. Diamond vapour installation replaces the duplex lamp.

Caraquet.—The catoptric light has been replaced by a 360° 5th order French lens, and 25 mm. Diamond vapour installation.

Heron Island, Chaleur Bay.—A new lantern and 5th order 360° French lens and a petroleum vapour light has been substituted for the catoptric apparatus heretofore in use.

McMann Point.—6th order dioptric illuminating apparatus replaces the catoptric light.

Machias, Seal Island, near middle of island.—A 55 mm. Diamond vapour installation replaces the duplex lamp.

Machias, Seal Island, S.E. from North Northwesterly light.—A 55 mm. Diamond vapour installation replaces the duplex lamp.

Miscou Island, Chaleur Bay.—A 3rd order dioptric double flashing light and lantern superseded the group revolving white catoptric light. The new light gives two flashes every 7½ seconds, thus:—

Flash	·5	seconds.
Eclipse	1·00	"
Flash	·5	"
Eclipse	5·5	"

The illumination is petroleum vapour burned under an incandescent mantle. Candle power, 100,000.

Pecks Point, Chicgnecto Channel.—The lighthouse formerly at Wards point has been moved here and a 7th order dioptric fixed white light has been established.

Portage Island, Miramichi Bay.—A 4th order dioptric occulting white light and new lantern replaces the old fixed white catoptric light. The new light is visible for 7 seconds with an eclipse of two seconds alternately. The illuminant is petroleum vapour burned under an incandescent mantle.

Swallowtail, Grand Manan.—The 4th order dioptric fixed white light has been replaced with a 4th order dioptric occulting white light, visible for 4 seconds and eclipsed for 2 seconds alternately. The illuminant is petroleum vapour burned under an incandescent mantle.

Other Aids to Navigation.

Cranberry Point, Lepreau Bay.—A bell buoy replaces the spar buoy heretofore moored at this point.

Prangle Point, Whitehead Island.—A bell buoy replaces the black can buoy hitherto moored at this point.

Gas Buoy Service.

The following new buoys have been placed:—

Quaco Ledge.—Gas and whistling buoy.

Young's Point, Caraquet River.—Gas buoy.

Grassy Point, Caraquet River.—Gas buoy.

PRINCE EDWARD ISLAND.

Improvements.

Blockhouse Point.—The catoptric light heretofore in operation has been replaced by a 360° 4th order French lens, and 35 mm. Diamond vapour installation with adjustable brass and iron stand.

Brighton Beach, Front Light.—A 25 mm. Diamond vapour installation replaces the duplex lamp formerly used.

Brighton Beach, Back Light.—A 25 mm. Diamond vapour installation replaces the duplex lamp formerly used.

Cascumpeque.—A 35 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp formerly used.

Fish Island, Main Light.—A 35 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp formerly used.

Indian Point.—A 35 mm. Diamond vapour installation replaces the duplex lamp formerly used.

Point Prim.—The catoptric light has been superseded by a 4th order 360° Chance lens and 25 mm. Diamond vapour installation with brass and iron stand.

Souris, East.—A 35 mm. Diamond vapour installation replaces the duplex lamp formerly used.

QUEBEC.

New Aids.

Bonaventure.—360° Chance anchor lantern.

Cape Chat Wharf.—360° Chance anchor lantern.

English Bay.—5th order 270° French lens, with brass and iron stands, and a 25 mm. Diamond vapour installation.

L'Ile, Bonaventure.—240° Chance anchor lantern.

New Richmond.—360° Chance anchor lantern.

Percé Wharf.—180° Chance anchor lantern.

St. Godfrey.—240° Chance anchor lantern.

Three Rivers, Front Light.—4th order French lens and capillary lamp.

Three Rivers, Back Light.—4th order French lens and capillary lamp.

Cape Anguille, Newfoundland.—3rd order dioptric double flashing light and lantern has been erected at this point. The light is flashing white, showing a group of two flashes every ten seconds, thus:—

Flash	·525 seconds.
Eclipse	1·350 "
Flash	·525 "
Eclipse	7·600 "

The illuminant is petroleum vapour burned under an incandescent mantle. Candle power 100,000.

IMPROVEMENTS.

Batiscan, Back Light.—Constant level lamp and 20-inch silvered copper reflector.

Batiscan, Back Light.—Constant level lamp and 20-inch silvered copper reflector.

Brandy Pots.—A 35 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp heretofore used.

Cap-au-Oies.—The catoptric fixed white light has been replaced by an occulting white light, visible for ten seconds and eclipsed for five, alternately. The apparatus is dioptric of the 4th order. The illuminant being petroleum vapour burned under an incandescent mantle.

Cape Magdalen, Gaspé Co.—A 3rd order dioptric triple flashing light and lantern has been erected on the new tower, the light is flashing white showing three bright flashes at intervals of six seconds, followed by an interval of 17½ seconds, thus:—

Flash	·5	seconds.
Eclipse	5·5	"
Flash	·5	"
Eclipse	5·5	"
Flash	·5	"
Eclipse	17·5	"

Complete revolution, 30 seconds. The illuminant is petroleum vapour burned under an incandescent mantle. Candle power, 55,000.

Deslauriers.—Constant level lamp with 24-inch silvered copper reflector.

Entry Island.—The fixed white light heretofore shown at this point has been changed to a 4th order dioptric occulting white light, visible for four seconds and eclipsed for six seconds alternately. The illuminant is petroleum vapour burned under an incandescent mantle.

Heath Point, Anticosti.—A first order dioptric single flashing light and lantern has been erected at this point, replacing the catoptric fixed white light heretofore exhibited. The characteristic is as follows:—

Flash	·21	seconds.
Eclipse	7·29	"

The illuminant is petroleum vapour burned under an incandescent mantle. Candle power, 500,000.

Little Metis.—The old alternating red and white catoptric light has been superseded by a 3rd order dioptric flashing white light, showing a group of three bright flashes every 7½ seconds, thus:—

Flash	·25	seconds.
Eclipse	1·00	"
Flash	·25	"
Eclipse	1·00	"
Flash	·25	"
Eclipse	4·75	"

The illuminant is petroleum vapour burned under an incandescent mantle. Candle power 55,000.

Rivière Valin, Front Light.—A 7th order 120° Chance lens with duplex lamp replaces the catoptric light formerly exhibited.

Rivière Valin, Back Light.—A constant level lamp with 20-inch silvered copper reflector.

South Traverse, (Temporary).—360° Chance anchor lantern.

West Point, Anticosti.—A 55 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp used heretofore.

Belle Isle, Newfoundland, High Light.—The fixed white light has been changed to an occulting white light, visible for five seconds and eclipsed for five seconds alternately. The illuminant is petroleum vapour burned under an incandescent mantle.

Belle Isle, Newfoundland, Low Light.—The fixed catoptric light has been changed to an occulting white light, visible for 5 seconds and eclipsed for 5 seconds alternately. The apparatus and lantern being of the 2nd order dioptric. The illuminant is petroleum vapour burned under an incandescent mantle.

Cape Bauld, Newfonudland.—A 2nd order dioptric double flashing light and lantern replaces the alternating red and white catoptric light heretofore shown. The illuminant is petroleum vapour burned under an incandescent mantle. The characteristic of the new light is as follows:—

Flash	·56 seconds.
Eclipse	1·94 "
Flash	·56 "
Eclipse	11·94 "

Complete revolution, 15 seconds. Candle-power, 270,000.

Point Rich, Newfoundland.—The revolving white catoptric light heretofore shown at this point has been superseded by a 3rd order dioptric double flashing light, shewing two flashes every 5 seconds, thus:—

Flash	·25 seconds.
Eclipse	·75 "
Flash	·25 "
Eclipse	3·75 "

The illuminant is petroleum vapour burned under an incandescent mantle. Candle-power, 100,000.

Ontario.

New Lights.

Argenteuil Bay, Ottawa River, Front Light.—120° Chance anchor lantern.

Argenteuil Bay, Ottawa River, Back Light.—120° Chance anchor lantern.

Cobourg Range, Front Light.—360° Chance anchor lantern.

Cobourg Range, Back Light—360° Chance anchor lantern.

Sheguiandah Range, Front Light—240° Chance anchor lantern.

Sheguiandah Range, Back Light.—120° Chance anchor lantern.

Three Mile Point.—200 mm. special acetylene lighthouse lantern and acetylene tank.

Walpole Island, Front Light.—Piper lantern with 8" pressed lens.

Walpole Island, Back Light.—Piper lantern with 8" pressed lens.

Improvements.

Bois Blanc.—The catoptric light has been removed and a 4th order 360° French lens with a 35 mm. Diamond vapour light installed.

Coppermine Point.—A permanent tower having been erected, a Canadian 5' 6" lantern with a 5th order French lens with brass and iron stand using duplex lamp replaces the dioptric 7th order light heretofore shown.

Cove Island.—A 55 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp.

Christian Island.—A 35 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp.

Chantry Island.—A 55 mm. Diamond vapour installation and adjustable iron stand replaces the duplex lamp.

False Ducks.—A 55 mm. Diamond vapour installation and adjustable iron stand replaces the duplex lamp.

Fort William.—120° Chance lantern.

Goderich, Main Light.—The catoptric light has been removed and a 4th order French lens with a 25 mm. Diamond vapour light installed.

Goderich, Front Light.—A 5th order 270° French lens with duplex lamp replaces the old catoptric light and the colour changed from fixed red to fixed white.

Goderich, Back Light.—A new constant level lamp with a 24" reflector has been installed.

Griffith Island.—A 55 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp heretofore used.

Ile Perrot.—The range lights at this point have been changed from fixed white acetylene lights to fixed white oil lights and are shown from anchor lanterns.

Lamb Island.—The catoptric light heretofore shown has been replaced by a 4th order 360° French lens and a 35 mm. Diamond vapour installation with adjustable iron stand.

Meaford.—Owing to the improvements made by the Public Works Department to this harbour, which necessitated changing the aids to navigation, they have been rearranged as follows:—

1st. A range of fixed incandescent lights on the east side of the harbour, which in one show the best water in approaching, have been erected. The front light is white and the back red.

2nd. A fixed red light is shown from an anchor lens lantern on a post on the outer end of the new extension to the breakwater.

3rd. The hand fog horn will be operated from the west pier, as heretofore.

Mississagi Strait.—A 4th order 240° French lens with a 35 mm. Diamond vapour installation and adjustable iron stand replaces the old catoptric light.

Nottawasaga.—A 55 mm. Diamond vapour installation with adjustable iron stand replaces the duplex lamp.

Oka Wharf.—A 7th order 240° Chance lens and brass stand has been installed.

Owen Sound, Front Light.—A 35 mm. Diamond vapour installation with brass and iron stand replaces the duplex lamp.

Owen Sound, Back Light.—A 35 mm. Diamond vapour installation with brass and iron stand replaces the duplex lamp.

Pelee Island.—The catoptric light heretofore shown has been replaced by a 5th order 360° French lens with adjustable iron stand and duplex lamp.

Pelee Passage.—A 55 mm. Diamond vapour installation replaces the duplex lamp.

Point Clark.—A 55 mm. Diamond vapour installation with an iron stand replaces the duplex lamp heretofore used.

Point Edward, Front Light.—The catoptric light has been replaced by a 5th order 360° French lens with brass stand and duplex lamp.

Point Edward, Back Light.—A new constant level lamp with an 18-inch silvered copper reflector has been supplied.

Port Elgin.—A 360° Chance anchor lantern replaces the catoptric light.

Sailors Encampment, Front Light.—A new constant level lamp with 20-inch silvered copper reflector has been supplied.

Sailors Encampment, Back Light.—A new constant level lamp with 20-inch silvered copper reflector has been supplied.

Salmon Point.—A 4th order 360° French lens with a 35 mm. Diamond vapour installation and iron stand replaces the old catoptric light.

Scotch Bonnet.—A 4th order 360° French lens with a 35 mm. Diamond vapour installation and adjustable iron stand replaces the old catoptric light.

South Bay Point.—A 4th order 360° French lens with a 35 mm. Diamond vapour installation and adjustable iron stand replaces the old catoptric light.

Stag Island.—A 360° 7th order Chance lens and brass stand, with duplex lamp replaces the light shown from the pressed lens.

Stokes Bay.—A new constant level lamp with 22-inch silvered copper reflector.

Thames River, Main Light.—A 5th order 360° French lens with iron stand and brass supports, also duplex lamp replaces the 7th order light.

Thunder Cape.—A 4th order dioptric single flashing light giving one bright flash every 15 seconds, the illuminant being petroleum vapour burned under an incandescent mantle, supersedes the revolving white catoptric light.

Colchester Reef.—A 55 mm. Diamond vapour installation and adjustable iron stand replaces the duplex lamp.

Gas Buoy Services.

Two new gas buoys have been placed near the eastern cut from Lake Erie to the Detroit river.

Courtwright, St. Clair River.—Gas buoy.

Point Edward, Sarnia.—Gas buoy.

OTHER AIDS TO NAVIGATION.

Flowerpot Island (temporary).—Hand fog horn.

MANITOBA.

New Lights.

Warrens Island Range, Front Light.—A 7th order 180° Chance lens and brass stand with duplex lamp.

Warrens Island Range, Back Light.—7th order 120° Chance lens and brass stand with duplex lamp.

Warrens Landing Range, Front Light.—Constant level lamp with 24-inch silvered copper reflector.

Warrens Landing Range, Back Light.—Constant level lamp with 24-inch silvered copper reflector.

Westbourne.—Three Wigham lamps have been supplied the Manitoba Gypsum Company for use on Lake Manitoba.

BRITISH COLUMBIA.

Improvements.

Cape Mudge.—The fixed white dioptric 7th order light has been replaced by a 5th order dioptric apparatus. The illuminant being petroleum vapour burned under an incandescent mantle.

Discovery Island.—A 4th order 360° Chance lens, Diamond occulting machine and 35 mm. Diamond vapour installation.

Fisgard.—A 35 mm. Diamond vapour installation replaces the duplex lamp.

Pachena Point.—A 1st order dioptric double flashing light and lantern has been erected, replacing the temporary light shown from a lantern on a gas tank. The light is flashing white showing two bright flashes of ·44 seconds duration, separated by

an eclipse of 5·36 seconds duration, the total period being 7·44 seconds, thus: Flash, ·44 second; eclipse, 1·2 seconds; flash, ·44 second; eclipse, 5·36 seconds. Candle power, 450,000.

Trial Island.—The temporary fixed white light has been replaced by a double flashing light of the 4th order, showing a group of two flashes with a short interval between them every 10 seconds. Candle power, 25,000.

Gas Buoy Service.

The following new gas buoys and beacons have been put in service:—

Casey Point, Prince Rupert Harbour.—Gas buoy.

Dall Patch.—Gas and whistling buoy.

Stenhouse Shoal, Browns Passage, Hecate Strait.—Gas and whistling buoy.

Lookout Island, Halibut Channel.—Gas beacon.

First Narrows, Vancouver Harbour.—Gas beacon.

Holland Rock, Chatham Sound.—The beacon heretofore maintained at Green Top island has been removed and installed at this point.

Other Aids to Navigation.

Inverness, North Skeena Passage.—Conical steel buoy.

Inverness Cannery, two cables west.—Wooden beacon.

Prince Rupert Harbour Fairway.—The red spar buoy has been removed and replaced by a conical steel buoy.

Shark Spit, Mary Island, Strait of Georgia.—A steel conical buoy, painted red has been moored off the end of the spit, replacing a wooden beacon which has disappeared.

INCLOSURE NO. 2.

Statement by provinces showing the number of light stations, lights, fog alarms and warning buoys in service during the fiscal year 1908-9.

—	Light stations.	Fog alarm stations.	Lights.	Lightships.	Lightboats.	Keepers.	Diaphones.	Sirens.	Fog horns and trumpets.	Fog bells.	Hand fog horns.	Hand fog bells.	Gas buoys.	Gas beacons.	Whistling buoys.	Bell buoys.	Submarine bells.	Fog whistles.	Fog guns or bombs.
Nova Scotia	246	2	274	2	–	248	10	–	3	5	38	–	36	–	15	34	4	7	1
New Brunswick	115	4	146	1	1	125	8	–	6	3	19	1	17	–	2	14	1	2	–
Prince Edward Island	45	–	72	–	–	48	1	–	1	–	–	–	4	–	3	1	–	–	–
Quebec	209	1	291	5	1	227	17	1	2	–	12	2	95	–	1	1	4	3	6
Above Montreal and Ontario	244	–	316	2	–	212	18	2	3	2	36	1	65	–	–	4	–	2	–
Manitoba	7	–	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
British Columbia	80	2	84	1	–	60	11	–	5	10	3	–	17	27	2	4	–	1	–
	946	9	1,193	11	2	923	65	3	20	20	108	4	234	27	23	58	9	15	7

Besides the above mentioned lights, there are listed in the 'List of Lights,' by provinces, the following number under private control:—

Nova Scotia	1
New Brunswick	1
Quebec	3
Ontario	41
British Columbia	4
Total	50

INCLOSURE NO. 3.

Statement by divisions showing the number of gas buoys in service throughout the Dominion during the fiscal year 1908-9.

District No.	District.	Type.						
		5 & 6	7 & 8½	9 & 9½	11	14	*C	Total.
1	Nova Scotia		7	3	15	2		27
2	New Brunswick**	2	11	3	9			25
3	Prince Edward Island***	1		4				5
4	Quebec		21				9	30
5	Platon-Montreal		14				51	65
6	Montreal-Kingston	7	33					40
7	Lake Ontario	1	1					2
8	Lake Erie		4					4
11	Thames River		1					1
12	St. Clair River		1					1
13	Sarnia		1					1
14	Goderich		1					1
15	Southampton		1					1
16	Georgian Bay		5		3			8
17	Sturgeon River	1						1
18	Sault Ste. Marie	2						2
19	Port Arthur		3					3
24	British Columbia		7	9	1			17
		14	111	19	28	2	60	234

*Compression.

**Nine buoys on the Nova Scotia coast have been included here, as they are attended to by the New Brunswick Agency.

***One buoy on the New Brunswick coast has been included here, as it is attended to by the Prince Edward Island Agency.

INCLOSURE NO. 4.

Statement giving complete list of stations at which gas buoys were in operation throughout the Dominion during the fiscal year 1908-9.

UNDER THE NOVA SCOTIA AGENCY.—DISTRICT No. 1.

Station No.	Name of Station.	Description of Buoy.
24	Pubnico	Gas and whistling.
27	Cape Sable, South-west Ledge	" "
29	Brazil Rock	" "
32	Shelburne	" "
35	Lockeport	" "
37	Little Hope	" "
39	Liverpool	" "
40	Liverpool Fairway	" and bell.
45	La Have	" "
48	Lunenburg	" and whistling.
49	Lunenburg, East point Ledges	" and bell.
54	North-east Shoal	" and whistling.
60	Sambro	" "
61	Outer Automatic, Halifax Harbour	" "
62	Inner Automatic, Halifax Harbour	" "
63	Neverfail, Halifax Harbour	Gas.
65	Thrumcap	" and bell.
67	Middle Ground, Halifax Harbour	Gas.
70	Egg Island	Gas and whistling.
72	Sheet Harbour	" "
76	Liscomb	" "
80	Isaac Harbour	" "
84	Whitehead	" "
86	Canso or Grime Shoal	" "
90	Cerberus Rock	" "
100	Guion Island	" "
102	Louisburg	" "
108	Sidney Fairway or Low Point	" "
109	South-east Bar, Sidney	Gas.

UNDER THE NEW BRUNSWICK AGENCY.—DISTRICT No. 2.

4-S.	Blonde Rock	Gas and whistling.
6-S.	South-west Fairway, Yarmouth	" "
8-S.	Cape Fourchu	" "
10-S.	Hen and Chickens, Yarmouth	" and bell.
12-S	South-west Ledge, Brier Island	" and whistling.
14-S.	North-west Ledge, Brier Island	" "
16-S.	Avon River	Gas.
3	Old Proprietor	Gas and whistling.
5	North Wolves	" "
7	Point Lepreau	" "
9	Partridge Island	" "
18	Foul Ground, St. John Harbour	Gas.
20	Quaco Ledge	Gas and whistling.
31	Scaumenac, Restigouche River	Gas.
32	Point Lanim, Restigouche River	Gas.
34	Point LaGarde, Restigouche River	Gas.
36	Oak Point, Restigouche River	Gas.
38	Traverse, Restigouche River	Gas.
40	Busteed, Restigouche River	Gas.
42	Horseshoe Bar East, Miramichi River	Gas.
44	Horseshoe Bar West, Miramichi River	Gas.
46	Young's Point, Caraquet	Gas.
47	Grassy Point, Caraquet	Gas.

UNDER THE PRINCE EDWARD ISLAND AGENCY.—DISTRICT No. 3.

1	Indian Rocks	Gas and whistling.
2	Point Prim	" "
3	Fitzroy Rock	" "
5	Miscouche Shoal	" "
6	Zephyr Rock, Shediac Bay, N.B.	Gas.

UNDER THE QUEBEC AGENCY.

District No. 4.

Station No.	Name of Station.	Description of Buoy.
27-B.	Father Point	Pintsch gas.
29-B.	Rimouski Road	"
38-B.	Barrett's Ledge	" gas and bell.
51-B.	Pilgrim Shoal	Gas and bell.
56-B.	Traverse, Middle Ground	Gas.
58-B.	Middle Ground Centre, Opposite Lower Traverse Pier	"
60-B.	Middle Ground, Traverse, South-west extremity	"
64-B.	Channel Patch	Pintsch, gas and bell.
65-B.	St. Jean Port Joli	Gas.
67-B.	Beaujeu Bank, North-east extremity	" and bell.
69-B.	Beaujeu, New Channel, left hand	Gas.
70-B.	Beaujeu Bank, South-west of stream	" and bell.
77-B.	St. Thomas	Gas.
80-B.	Quarantine or Grosse Isle	"
86-B.	Madame Island Reef	"
87-B.	Beaumont Reef	"
89-B.	Point Levis	"
96-B.	Lark Reef, South end	Pintsch gas.
102-B.	Morin Shoal	Gas.
106-B.	Grande Pointe	Pintsch gas.
110-B.	Eastern Narrows, North Traverse	"
10-Q.	Fly Bank	Gas.
15-Q.	St. Augustin Bar	"
24-Q.	Pointe aux-Trembles	"
28-Q.	Point St. Antoine	"
34-Q.	Ste. Croix	"
49-Q.	Point Platon	"
Temporary.	St. Thomas Bank	Pintsch gas.
"	"	"
"	Lower Traverse	Gas.

MONTREAL DIVISION.

District No. 5.

2-C.	Point Citrouille	Gas.
15-C.	Champlain or Pouillier Carpentier	"
20-C.	Ile Bigot	"
23-C.	Becancour, Lower Traverse	"
30-C.	Becancour Bend	"
39-C.	Becancour, Upper Traverse	"
43-C.	Cap Madeleine	"
55-C.	Ile aux Cochons	"
59-C.	Three Rivers Shoal	"
6-L.	Pouillier Laforce	"
13-L.	English Bay	"
17-L.	Curve No. 3	"
21-L.	"	"
25-L.	"	"
35-L.	Pointe du Lac course	"
41-L.	"	"
47-L.	"	"
57-L.	Yamachiche Bend	"
48-L.	"	"
67-L.	Curve No. 2 to White Buoy	"
79-L.	"	"
85-L.	"	"
91-L.	Curve No. 1 to Curve No. 2	"
97-L.	"	"
103-L.	"	"
111-L.	Ile aux Raisins	"
123-L.	Pointe aux Soldats	"
136-L.	Ile de Grace	"
146-L.	Nepigon Shoal	"
1-M.	Hay Island or Ile aux Foins	"
5-M.	St. Ours Traverse	"
16-M.	Bellmouth Curve	"
20-M.	"	"
24-M.	"	"

MONTREAL DIVISION—*Con.*

District No. 5—Con.

Station No.	Name of Station.	Description of Buoy.
31-M.	Contrecœur Bend	Gas.
45-M.	Contrecœur Junction	"
82-M.	Plum Island	"
89-M.	Verchères	"
103-M.	Pouillier des Trois Bouées	"
117-M.	Cap St. Michel	"
124-M.	Ile des Lauriers	"
129-M.	Varennes Curve	"
133-M.	Varennes Curve	"
149-M.	Pointe aux Trembles Bend	"
167-M.	Pointe aux Trembles Curve	"
174-M.	Longue Pointe	"
177-M.	Pouillier à Gagnon	"
181-M.	Longueuil	"
191-M.	Longueuil	"
193-M.	Longueuil	"
194-M.	Maisonneuve	"
195-M.	Ile Ronde	"
196-M.	Longueuil	"
52-Q.	Portneuf	"
68-Q.	Batture Simon	"
73-Q.	Batture du Chêne	"
77-Q.	Batture à Cadieux	"
80-Q.	Cap Charles	"
90-Q.	Cap à la Roche Curve	"
97-Q.	Upper Cap à la Roche	"
105-Q.	Cap Levrard	"
110-Q.	Cap Levrard	"
115-Q.	Batiscan Traverse	"
119-Q.	Batture St. Pierre	"
123-Q.	Batiscan Anchorage	"
129-Q.	Batture Perron	"

UNDER THE PRESCOTT AGENCY.

District No. 6.

25-F.	Grosse Point	Gas.
30-F.	Soulanges Canal, entrance	"
36-F.	Coteau Landing	"
40-F.	Hay Point	"
43-F.	West end of Middle Ground	"
46-F.	Port Lewis	"
48-F.	Point Mouillé Flats	"
64-F.	Lancaster	"
68-F.	Island Bank	"
69-F.	East Lancaster Bar	"
76-F.	Lancaster Bar	"
78-F.	Squaw Island	"
84-F.	Clark's Island	"
88-F.	Colquhoun Island	"
96-F.	St. Regis Dyke, West end	"
16-S.	Four-fifth mile above Lachine	"
18-S.	Foot of dredged cut above Lachine	"
38-S.	Lachine Cut, upper entrance	"
48-S.	East of Lightship No. 2	"
53-S.	Off Brown's Point	"
76-S.	Between Light No. 2 and Light No. 3	"
86-S.	Between top light and Ile Perrot	"
98-S.	Windmill Point	"
100-S.	Entrance to Soulanges Canal, East	"
102-S.	Entrance to Soulanges Canal, East	"
104-S.	Soulanges Canal, East	"
2-T.	Brockville Narrows	"
4-T.	Hillcrest	"
6-T.	Cole Shoal, Middle Ground	"
8-T.	Fiddlers Elbow	"
12-T.	Gananoque Narrows	"
38-T.	Wolf Island	"
46-T.	Cold Bath Shoal	"

UNDER THE PRESCOTT AGENCY—*Concluded.*

Station No.	Name of Station.	Description of Buoy.
69-T.	West end of Middle Ground, between Snake Island and Seven Acre Shoal	"
102-T.	Northport Shoal	"
106	Trenton	"
6-U.	Delaney's Shoal	"
8-U.	Archibald Shoal	"
40-U.	Farran Point	"
54-U.	Prunner Shoal	"
127-U.	Dixon Island	"
136-U.	Upper entrance, Iroquois Canal	"

ONTARIO DIVISION.

Lake Erie, District No. 8.

1	Bar Point	Gas.
2	Grub Reef	"
5	Eastern Cut, Lake Erie	"
6	Eastern Cut, Lake Erie	"

Thames River, District No. 11.

1	Thames River	Gas.

St. Clair River, District No. 12.

1	Courtwright	Gas.

Sarnia, District No. 13.

1	Point Edward	Gas.

Goderich, District No. 14.

2	Goderich Fairway	Gas.

Southampton, District No. 15.

4	Chantry Island, North	Gas.

Georgian Bay, District No. 16.

1-P	Spruce Shoal	Gas.
2-P	Hooper Island	"
3-P	Middle Ground	"
4-P	Three Star Shoal	"
5-P	Seguin Bank	Gas and whistling.
6-P	Lone Rock	" "
7-P	Lockerbie Rock	Gas.
8-P	Surprise Shoal	Gas and whistling.

ONTARIO DIVISION—*Concluded.*

Sturgeon River, District No. 17.

Station No.	Name of Station.	Description of Buoy.
1-N	Sturgeon Bar	Gas.
	Sault Ste. Marie, District No. 18.	
1	Vidal Shoal	Gas.
2	Upper Turning Buoy	"
	Port Arthur, District No. 19.	
1	Port Arthur	Gas.
2	Southeast Dredged Channel, Fort William	"
3	Northeast Dredged Channel, Fort William	"

BRITISH COLUMBIA DIVISION.

District No. 24.

1	Lookout Island	Gas beacon.
2	Kyuquot	Gas and whistling.
17	Swiftsure Bank	Gas, whistling and bell.
19	San Juan	Gas and whistling.
23	Lewis Reef	Gas beacon.
24	Kelp Reef	"
25	Dock Island	"
27	Helen Point	Gas and explosive fog bell beacon.
29	Walker Rock	Gas beacon.
30	Coffin Islet	"
31	Danger Reef	"
32	Joan Point	Gas beacon.
33	Gabrola Reef	"
35	Sand Head	Gas, whistle and bell.
37	First Narrows, Vancouver Harbour	Gas beacon.
40	Sechelt	"
42	Gallows, Point, Nanaimo Harbour	"
43	West Rocks	"
45	Kelp Bar	Gas and bell.
49	Lund	Gas beacon.
52	Gillard Island	"
53	Maud Island	"
54	Chatham Point	Gas and explosive fog bell beacon.
58	Haddington Reef	Gas.
64	Zero Rock	Gas beacon.
67	Fog Rocks	"
70	Dall Patch	Gas and whistle.
72	Vancouver Rock	"
74	Boat Bluff	Gas beacon.
84	Klewnuggit	"
86	Watson Rock	"
89	Holland Rock	"
92	Casey Point	Gas.
93	Kestrel Rock	"
94	Spire Ledge	"
95	Barrett Rock	"
96	Coast Island	Gas beacon.
97	Ridley Island	"
101	Alford Rock	Gas.
103	Hodgson Reef	Gas and whistling.
105	Pointers	Gas beacon.
107	Stenhouse Shoal	Gas and whistling.
110	Skidegate or Lawn Point	Gas and bell.
112	New England Rock	Gas and whistling.

INCLOSURE NO. 5.

*Outline chart Atlantic coast of Canada showing quick flashing lights of the hyper-radial, 1st order, 2nd order, 3rd order, 3rd order small model and 4th order in operation during the fiscal year 1908-9.

The whole respectfully submitted.

J. G. MACPHAIL,
Acting Commissioner of Lights.

Commissioner of Lights Office,
Marine and Fisheries, Canada.
March 31, 1909.

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* NOTE.—The outline chart will be found with the illustrations at the end of the Report.

APPENDIX No. 3.

RIVER ST. LAWRENCE SHIP CHANNEL.

SIR,—I have the honour to present the following annual report on the operations for the improvement of the River St. Lawrence Ship Channel during the fiscal year ending March 31, 1909.

While every effort has been made to urge forward the work, it is necessary to take very great care to so arrange the operations that navigation is not interrupted, nor dredge vessels put in more than the usual danger.

The success of the operations is due in a very large measure to the skill and energy of the staff in charge, and also to the untiring and careful work of the various captains, engineers, and crews of the different vessels.

I have the honour to be, sir,
Yours obediently,

V. W. FORNERET, B.A.Sc.
Superintending Engineer.

G. J. DESBARATS, Esq.,
Acting Deputy Minister, Marine and Fisheries,
Ottawa.

HISTORY OF THE SHIP CHANNEL.

The St. Lawrence, owing to its situation, is the natural route from the Atlantic to the northern and northwestern half of the North American continent.

The opening of the Lachine canal, connecting Montreal with the great lakes in 1825, established the route commercially.

The light draught sailing vessels could then reach Montreal without trouble, except during a few weeks in the autumn when they resorted to lightering.

In 1844, it was in an effort to give navigation up to Montreal for vessels of 500 tons, that the first work of dredging was undertaken.

The first proposals for improvements were discussed in 1825, the national character of the work being then recognized. Surveys were made and reported upon in 1831, and again in 1838.

In 1841, during an investigation, the committee proposed a tonnage duty sufficient to provide for the cost of the improved channel, which it was considered would be less than that of lighterage. It was, however, agreed that 'in order to draw the produce of the west down the St. Lawrence, it was expedient to make the transit charges as light as possible.'

Operations were commenced by the 'Board of Works' in 1844 and continued until 1847, when owing to opposition as to the location of the channel the work was abandoned. This work was in Lake St. Peter, in what was known as the Straight channel. After sixty years, it is now considered that the straight channel as commenced, would have been preferable in many ways.

In 1850, the Harbour Commissioners of Montreal proposed that they could do the work more economically and expeditiously. They asked for authority to under-

take the work and to charge a tonnage duty to pay for the 8 per cent interest and 2 per cent sinking fund.

This plan was adopted in August, 1850, and the commissioners were authorized to proceed in such a manner as they should deem best, the government plant being transferred to them.

The Harbour Commissioners, after examination and the best advice obtainable, adopted the location of the deepest natural channel in Lake St. Peter. This results in the present channel with five tangents, instead of two long straight courses as at first commenced.

The original depth through Lake St. Peter, was 10 feet 6 inches.

From 1850, the channel was deepened from stage to stage until in 1888, when the debt amounted to somewhat over three million dollars, the government decided to complete the channel as a national work, and to assume the debt, and from that day the channel has been open free to the commerce of the world.

At that date the channel had been deepened to 27½ feet at ordinary low water from Montreal to Cap à la Roche, and from there to Quebec the tide was available.

Nearly 20,000,000 cubic yards had been dredged at an average cost of about 20 cents per yard, including the cost of the plant.

A dredge of the type of 1846, excavated in Lake St. Peter in one day 1,200 cubic yards. By wonderful improvements, in 1888, the dredge of that time could make 7,200 yards without trouble. At the present time, working day and night, the Lake St. Peter dredge removes at a fairly average rate 20,000 cubic yards per day.

This work was conducted by the Department of Public Works of Canada from 1889 until 1904, when the management and control of the river together with the shops and dredges, were handed over to the Department of Marine and Fisheries, which department had general charge of navigation.

At the present time a splendid channel of 30 feet at extreme low water exists from Montreal to Cap à la Roche, and to Quebec, by taking advantage of the tide.

The success of the work is in a great measure due to the geographical situation of the route, the physical features of the river favourable for improvement, the determination and public spirit of the business men and industrial corporations of Montreal, and to the recognition by the government of Canada of the national character of the project.

PROGRESS OF THE OPERATIONS.

From 1850 to 1888 the work was conducted by the Harbour Commissioners of Montreal.

The first dredging plant was designed and engined on the Clyde in 1840.

It is interesting to note that in 1906 the designs for the latest dredge for the Clyde, were made by Mr. John Kennedy, C.E., then Chief Engineer of the Montreal Harbour Commissioners.

The St. Lawrence dredging operations have always been conducted departmentally. The extent and continuity of the work have resulted in a staff, and an organization of men and plant, which is one of the subjects of interest in the commercial and engineering circles of the world. The engineers who have been connected with the St. Lawrence ship channel comprise the best known men in the profession in Canada.

The names of Bayfield, Gzowski, Keefer, Forsyth, Nish and Kennedy, who were the chief engineers at various times between 1840 and 1888, will go a long way to explain the success of the efforts for obtaining the improvements as planned by the government and the commissioners.

The Superintendents Vaughan, Bell, Armstrong, McKenzie and Howden have from time to time improved methods and plant, until the operations on the St. Lawrence are considered examples for other and older ports.

The rule has been to thoroughly understand the conditions and requirements and then to design dredging machines for the special work they are expected to perform.

The St. Lawrence dredging plant comprises a wide range of types:—

Two elevator dredges for soft clay,
Four elevator dredges for hard-pan and shale rock,
One hydraulic dredge for soft mud, discharged by pipe.
One sand pump hopper sea-going dredge,
One hydraulic hopper sea-going dredge.

In every case these machines are actually doing their work as well or better than it could be dredged by any other existing type in the world.

With the staff for designing the channel and a plant specially suitable for the work proposed, the next consideration is the organization for keeping the machines constantly at work.

The St. Lawrence dredges work for seven months each season. They have then five months in winter quarters. The object of the working staff is to keep the dredge going as constantly as possible during the seven-month's season. Owing to the very hard character of the material, and the necessity of not interrupting traffic, breakages and stoppages are frequent. The endeavour is, however, to keep as near to 70 per cent of the full working time as possible.

The working hours with double crews, are 132 hours per week, *i.e.*, from midnight on Sunday, without stops for meals, until noon on Saturday. The men were glad to work during twelve hours on condition of their receiving about 10 per cent increase of wages.

The crews of the dredges, tugs, barges, &c., are almost exclusively French Canadians, born and brought up on the banks of the St. Lawrence. For skill, patience, sobriety and fitness for the work, it would be quite impossible to find their equal. Most of them make it their life work. They are trained to every phase of operating a dredge to the limit of its strength, to being resourceful and to quickly making repairs.

By order from the minister conducting the department, owing to the faithful discharge of continuous duties, the men are taken to Sorel every second Sunday.

The repair and construction shipyard and shops at Sorel also add very materially to the success. The rule is to drive the machinery to its limit, to expect breakdowns, and to have spares or the equipment for speedy repairs.

The strain on the men and machinery is very great. At the end of seven months a rest is inevitable.

The whole work being in the interest of navigation, the channel is periodically examined and swept, to be sure that there are no obstructions. The depth of water is given daily. In the first part of the season, the depth of the 30-foot channel ranges from 36 to 42 feet. It lowers in September, and usually the lowest stage is reached in October. The highest in 1908 was 42 feet 4 inches, and the lowest 30 feet.

In the long experience of design and usage, the machinery has been brought to a state of perfection and strength, the shale-rock merging into soft limestone is dredged, at a speed and cheapness most extraordinary.

As a government organization the ship channel is well known as being able to compete in every way with operations by contract. This is due to the fact that an efficient staff, good men, and the best plant are provided.

The aims which have resulted in marked success are briefly as follow:—

(1) To keep the plant up to the best standard of design and suitability for the work.

(2) To provide first-class officers and crews.

(3) To design the improvements with careful consideration.

(4) To keep down costs by a thorough system of comparative statistics.

(5) To keep up the quality by a regular and systematic inspection.

(6) As a public work to keep the confidence of the public by consultation with those who are interested and make use of the improvements.

THE PRESENT PROJECT.

The present project for a 30-foot channel between Montreal and Quebec was adopted in 1889, while the improvements below Quebec were decided upon in 1906.

The estimate of 1899 was for ten years' work. The plant was only partially available until 1903.

The project for the channel between Montreal and Quebec had in view a channel of 30 feet depth, at the extreme low water of 1897, from Montreal to tide water at Batiscan, and from Batiscan to Quebec at extreme low tide. The width contemplated was a minimum of 450 feet in the straight portions, and from 550 to 750 feet at the bends. An anchorage was to be provided for Lake St. Peter.

Of this work, the 30-foot channel from Montreal to tide water at Batiscan, was completed in 1906. This is now in use, deep draught vessels in the autumn waiting for tide, to pass cap à la Roche and St. Augustin bar.

The work remaining to be done is about two miles of shale rock at Cap à la Roche; about one mile at Grondines, about one mile at St. Augustin bar, and also about one mile of widening at Ste. Croix, and 5¼ miles of widening in Lake St. Peter.

Cap à la Roche will probably take from three to four years to complete, while the remainder to Quebec should be completed at the same time or in one year longer.

The widening of Lake St. Peter it is expected will be done in 1909.

The project of work below Quebec, had in view a 30-foot channel at low tide at St. Thomas flats, and at Beaujeu banks everywhere 1,000 feet wide.

The Beaujeu bank will be completed in 1909.

The St. Thomas flats, where the material is clay and sand, and covering nearly four miles of channel should be finished in about three years.

THE PLANS FOR THE FUTURE.

The completion of the 30-foot project being in sight, it is not too soon to look forward to the next step.

The 30-foot channel was designed and laid out so as to be easy of navigation for the largest ships that could pass with the available depth. The widths and curves were designed for a much greater available depth than 30 feet.

A new depth may therefore be commenced without changing the lines of the channel, or the aids to navigation.

With the ship channel dredges a face of 4 feet is preferable as being a full economical cut. As, however, 35 feet would give easy navigation to the largest present New York steamships, it has been considered the best proposal for the next project.

The plant available at present for between Montreal and Quebec, consists of six elevator dredges, one hydraulic dredge, two stone lifters, and a complement of tugs, scows, &c.

For below Quebec there are two splendid seagoing hopper dredges.

For the upper reach one large size spoon dredge is under construction. A steel hull elevator dredge, capable of dredging to a greater depth is authorized, as well as a new stone-lifter.

At least two of the present elevator dredges having wooden hulls will not last many more years, and the construction should be commenced of one each year. They take about two years to build.

Two or three additional tugs and several scows will also be required.

The plant for below Quebec is in every way suitable for the work, except that a larger tug should be connected with it.

The present progress is excellent, the plant is unique in fitness and economy, and the extent and importance of the operations would be considered remarkable anywhere in the world.

ACCIDENTS IN THE ST. LAWRENCE RIVER BETWEEN MONTREAL AND FATHER POINT.

Not one accident of importance took place in the ship channel proper during the season of 1908, and those which did occur were of minor character. This speaks well for those in charge of the vessels, the season being an exceptional one for heavy fogs and thick smoke, which completely paralyzed navigation for days at a time.

The only accidents in the St. Lawrence river, between Montreal and Quebec, were as follows:—

SS. *Marina*, Donaldson line, went aground at Varennes on September 18, in thick fog. Was refloated. No damage.

SS. *Fimerite*, went ashore at Longue Pointe, on October 15, during fog. Was refloated. No apparent damage.

C.G.S. *Montcalm* and C.P.R. steamer *Milwaukee*, collision in Quebec harbour. The C.G.S. *Montcalm* sank in Custom House basin, where she had gone for refuge. *Milwaukee* had her bow badly damaged.

SS. *Inishowen Head*, Head line, went ashore, Union cove, Quebec, October 1. Refloated. No damage.

BETWEEN QUEBEC AND FATHER POINT.

SS. *Amethyst* went ashore at Green island, near Saguenay river, on June 30. Refloated. No damage.

SS. *Catalone*, British steamer, grounded at Red island on August 12. Refloated No damage.

SS. *Gustav Adolph*, Swedish steamer, went ashore at Goose island on September 5. Refloated, repaired.

SS. *Corinthian* (Allan line), and SS. *Malin Head* (Head line). Collision near Grosse Isle on September 13. Both vessels badly damaged. *Malin Head* beached at St. Laurent to prevent sinking. Collision due to haze, caused by smoke from forest fires.

SS. *Ashanti*, British steamer, went ashore at Madame reef, opposite Island of Orleans, on October 26, during fog. Refloated, repaired.

MARINE SIGNAL SERVICE.

The commencement of night navigation, and the increase in size of ships, as well as general improvement on all sides, called for a system of signal service.

It was frequently found that by prompt action serious results from accidents could have been avoided, and sometimes signals of danger could have prevented bad accidents.

The government of Canada, therefore, through the Minister of Marine and Fisheries, took up the matter and established in connection with the River St. Lawrence Ship Channel a telephone service extending from Montreal to Crane island below Quebec.

There are twelve stations, established at the following places:—

—	Distance in nautical miles from Montreal.	In operation.
Montreal	0	Day and night.
Longue Pointe	5	"
Verchères	19	During daylight.
Sorel	39	Day and night.
Three Rivers	71	"
Batiscan	87	During daylight.
St. Jean des Chaillons	93	Day and night.
Portneuf	108	During daylight.
St. Nicholas	127	Day and night.
Cap Rouge	132	During daylight.
Quebec	139	Day and night.
Crane island	171	"

The above stations are connected by a private through telephone system, terminating at Quebec and Montreal.

Crane island station communicates with Quebec via the Bell Telephone Company's system.

The telephone service was started September 1, 1907, but the system of signals was officially inaugurated by the Honourable the Minister of Marine and Fisheries on November 5, 1908.

The value of the combined system of telephone and signals, is such, that expressions of satisfaction are received every day during the season of navigation, when orders may be given, information as to whereabouts of vessels obtained, and signals to passing boats recorded.

The service has also been very useful in connection with the dredging operations, as communications can be made immediately with the officials at the shops at Sorel, where orders can be given for repairs, and owing to the promptness of the service a great deal of valuable time has been saved.

NEW STEEL SPOON DREDGE.

The new steel spoon dredge now nearing completion at the Sorel shipyard, will be the most powerful dredge of this type afloat. She was designed by Mr. John Kennedy, Consulting Engineer of the Montreal Harbour Commissioners.

This dredge is intended for work at Cap à la Roche. It will tear out the bank quickly, and afterwards an elevator dredge will go over the ground to clean up, and make a smooth bottom.

The completion of this dredge has been greatly delayed owing to necessary alterations in the design.

The following are her dimensions:—

	Feet.	Inches.
Length moulded	108	0
Breadth moulded	42	0
Depth at bow	11	6
Depth at stern	9	9
Length of boom (centre to centre)	55	3
Length of spuds	74	0
Main engines, 2 compound		16 and 30 x 22.
Swinging engines, simples		10 x 14
Capstan engines, simples		10 x 14
Bucket capacity	1 14-cub.yd., for soft material.	
	1 8-cub.yd., for hard "	

The pull on the bucket rope will equal 180,000 lbs. The dredge will be able to work to 50 feet, and will be equipped with electric light.

One marine boiler 12 feet in diameter by 10 feet long will furnish steam for the machinery. The boiler will have a working pressure of 160 lbs. per square inch.

NEW ELEVATOR DREDGE.

In order to expedite the work at Cap à la Roche, the department has decided to build a new elevator dredge for working in rock. This dredge is to be modeled after the *Baldwin* (No. 6) but will be able to dredge to 52 feet, and the hull is to be built of steel.

An appropriation for this vessel has been placed in the estimates for 1909-10.

The following are her dimensions:—

	Feet.
Length between perpendiculars	180
Breadth of beam (moulded)	40
Depth of hold	14
Draught (loaded)	9

C.G. ICE-BREAKER 'MONTCALM.'

Operations 1908-9.

The opening of St. Lawrence navigation last spring, ten days earlier than the previous year was very much hastened by the operations of the steamer *Montcalm* at the Cap Rouge ice-bridge, and also by the successful operating of the steamer *Lady Grey* in breaking up ice-jams at the head of Lake St. Peter amongst the islands.

Under the command of Captain Gagnon, the *Montcalm* began attacking the Cap Rouge ice-bridge on January 12, 1909. The bridge was found to be exceptionally strong, and composed of from 35 to 40 feet in depth, of heavy packed ice, for about three miles, extending from abreast of the Chaudière river up to a short distance above Pointe à Bazile low light. Above this, there was an open area of water about six miles long, and from 1,000 to 2,500 feet in width, containing more or less floating ice which moved up and down with the wind and tide.

After strenuous work during the whole winter, the ice-breaker succeeded in cutting a wide channel through the ice and attained the open water by March 30. She then worked for a few days enlarging this cut, to allow a free passage for ice coming down, to increase the discharge, and thereby help to lower the river level in the upper reaches. This effect on the water level is generally conceded, by information obtained at different points.

Captain Gagnon and his officers deserve a great deal of credit for the capable manner in which they conducted this work, this being the first year on record that an attempt to break up the Cap Rouge ice-bridge has proved a complete success.

After the Cap Rouge ice-bridge was completely destroyed, the *Montcalm* worked her way with fair progress up the river, breaking ice averaging a thickness of 20 inches, as far as Portneuf, where she arrived on April 10.

At Portneuf a ship channel officer was sent on board with one of our best pilots to conduct the operations in the upper part of the river. Here heavy packed ice from 3 to 4 feet in thickness somewhat checked the steamer's advance, but she finally succeeded in forcing her way through to clear water on April 13. On this day it was reported that the ice up as far as Port St. Francis was on the move, so that it was considered advisable to return to Quebec to be on hand in case of a jam occurring at Cap Rouge narrows.

By the 15th, there being no more danger of a jam at Cap Rouge, most of the ice having passed down, the *Montcalm* started up for Port St. Francis to break up any jams which might form when the lake ice started down.

She reached as far as St. Jean at 11.20 a.m., and was obliged to tie up on account of a very heavy snow storm.

Next day, the 16th, she proceeded up, meeting very little ice, as far as Nicolet Traverse, at the foot of Lake St. Peter.

On her arrival at Nicolet Traverse the *Montcalm* immediately commenced operations, and soon succeeded in starting the lake ice to move down. This jammed at Port St. Francis the following morning, but was easily broken up again, and the ice commenced to move and continued down steadily all that day and during the next night.

On Sunday, April 18, the *Lady Grey* was met at Port St. Francis after she had successfully broken up several jams amongst the islands at the head of Lake St. Peter. This steamer reported the lake practically clear.

There being no more ice in sight, instructions were given for the *Montcalm to* return to Quebec, and the *Lady Grey* to proceed to Montreal, the former arriving at Quebec on the same day and the latter reaching Montreal at 1.30 p.m. after running in clear water the whole way up.

From April 19 to the 21st, while in Montreal, the *Lady Grey* rendered great help in clearing out the ice around the upper piers in the Montreal harbour. She then returned to Sorel.

The results obtained by the operations of the steamers *Montcalm* and *Lady Grey* have not only pleased shipping interests by hastening the opening of navigation, but have also given much satisfaction to riparian residents on both banks of the St. Lawrence between Montreal and Quebec, as it is generally claimed that the work performed by the ice-breakers has prevented floods and thus saved much suffering and damage to property.

GENERAL INFORMATION.

At the end of the season of 1908 there was a completed channel to a depth of 30 feet at extreme low water, from Montreal to Cap Levrard, 4 miles below Batiscan, a distance of 104¼ miles below Montreal. Below Cap Levrard advantage is taken of the tide during the low water season to obtain this depth to pass Cap à la Roche and St. Augustin bar.

The available depth in the Cap à la Roche dredged channel is indicated by the St. Jean des Chaillons semaphore, which was put in operation for the season on June 17, 1908.

The available depth over the undredged St. Augustin bar is indicated by the semaphore at St. Nicholas, which was started for the season on June 24, 1908.

With the exception of some minor shoals at Champlain, there is practically no filling in, in the ship channel, and, although, since its commencement no actual boulders have been known to have been carried into the dredged channel, such conditions are possible, and it has been decided, therefore, that once a year the dredged and shallow channels shall be swept.

Mr. N. B. McLean, C.E., with an assistant, are specially detailed for this important work. A twin-screw steamer and a testing scow make up the present sweeping plant.

The additional dredging which has been done below Quebec has increased the amount of sweeping to such an extent that one testing scow is not adequate, and a second outfit will soon have to be procured.

During the course of the sweeping in 1908 no obstruction of any serious nature was found. Two or three vessels were reported to have touched, but the most careful examination failed to reveal anything in the channel.

The work of deepening the St. Thomas channel below Quebec was commenced late in the autumn of 1907, and by the close of the season of 1908, good progress had been made.

The Beaujeu channel below Quebec, was commenced in 1906. On June 29, 1908, a channel 600 feet wide, and to 30 feet in depth at extreme low tide, was officially opened. It is expected that the full width of 1,000 feet will be completed during the season of 1909.

The exceedingly dry spell of weather during the latter part of the summer of 1908 had the effect of lowering the level of the water in the St. Lawrence to the datum adopted for low water, viz., the low water of the year 1897, which was the lowest on record, except for the extraordinary low water of 1895, which for a few days reached a stage 6 inches lower.

The annual trip of inspection of the ship channel and the works connected therewith, was made by the Honourable the Minister of Marine and Fisheries on November 5, 1908.

The steamer *Lady Grey* left Victoria pier, Montreal, at 8.30 a.m., and the inspection occupied two days and a half, covering various works between Montreal, and Crane island, below Quebec.

The minister, the Honourable Mr. Brodeur, was accompanied by his officials, representatives of the Shipping Federation, Montreal Board of Trade, La Chambre de Commerce, the mayor of Quebec, representatives of the Montreal and Quebec Harbour Commissioners, and the Montreal and Quebec pilots.

Much satisfaction was expressed, at the progress made, especially in dredging, at the various points, and also at the good organization of the Marine Signal Service which was established in 1907. This service was especially useful during the latter part of the season of 1908 when so much smoke and fog prevailed.

Another feature of the trip was the inauguration of a new code of signals, to be used between signal stations and passing steamers, by means of flags by day and lights by night.

The total cost from 1851 to the end of the fiscal year of the ship channel, including plant, shops, survey, &c., is as follows:—

Dredging	$7,208,543 50
Plant, shops, surveys, &c	3,501,449 96
	$10,709,993 46

The total number of cubic yards dredged, the material varying from very hard shale rock, to soft blue clay, amounted to 61,767,292. .

Year.	Average depth for each Month in the 27½ foot Channel. (27½ feet in Ordinary Low Water.)							From Sorel Gauge during each year May to November.	
	May.	June.	July.	August.	Sept.	Oct.	Nov.	Highest.	Lowest.
	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.
1890.....	35 6	35 3	31 9	30 6	30 9	29 9	30 6	37 0	29 0
1891.....	34 6	31 3	29 9	29 9	30 0	28 3	28 3	36 9	27 3
1892.....	31 0	31 9	31 6	30 6	28 9	28 3	28 3	33 6	27 3
1893.....	36 0	34 3	30 9	29 9	29 6	28 6	28 0	37 6	27 6
1894	34 6	31 9	31 0	29 2	28 3	28 9	29 0	36 0	27 7
1895...	33 3	31 3	28 3	28 3	27 6	26 9	26 9	34 6	25 10
1896.....	33 6	30 6	28 9	28 0	27 6	27 9	29 0	37 0	27 4
1897.....	35 6	32 6	30 3	29 3	28 0	27 0	27 6	37 0	26 5
1898	31 6	30 9	29 8	28 6	28 2	28 3	28 6	32 1	26 9
1899.....	36 2	31 9	30 3	28 6	27 6	28 0	27 9	37 9	26 9
1900.....	33 6	30 9	30 6	29 6	28 1	28 9	29 2	35 9	27 4
1901.....	34 3	31 10	29 2	28 3	27 7	27 4	27 3	36 3	26 6
1902...	32 2	32 2	32 2	29 4	28 1	28 1	29 0	34 1	27 6
1903.....	33 0	30 11	30 5	29 5	28 4	29 0	27 11	32 8	26 11
1904.....	36 3	34 5	30 9	29 5	29 5	30 4	29 3	37 4	28 1
1905.....	31 10	30 8	29 7	29 0	28 0	28 5	28 1	33 6	27 1
1906.....	32 4	31 5	29 3	27 11	27 3	27 4	27 6	33 3	26 9
	Average Depth for each Month in the 30 foot Channel. (30 feet at the Extreme Low Water of 1897.								
	May.	June.	July.	August.	Sept.	Oct.	Nov.	Highest.	Lowest.
1907.....	37 1	35 9	34 3	32 10	32 4	32 9	33 7	38 3	31 10
1908.....	41 5	37 10	33 10	32 10	32 0	31 0	30 6	42 4	30 0

COST OF SHIP CHANNEL TO DATE.

TABLE showing the Total Cost of the Dredging and Plant, and the Quantities dredged to March 31, 1909.

—	Cost of Dredging.	Expenditure for Plant, Shops, Surveys, &c.	Quantities dredged.
	$ cts.	$ cts.	Cubic Yards.
MONTREAL HARBOUR COMMISSIONERS, 1851 TO 1888.			
Dredging Montreal to Cap à la Roche to 27½ feet at ordinary low water, and from Cap à la Roche to Quebec to 27½ feet at half tide	3,402,494 35	534,809 65	19,865,693
DEPARTMENT OF PUBLIC WORKS.			
Dredging consisting of widening and cleaning up of channel : deepening Cap à la Roche to Cap Charles to 27½ feet at ordinary low water, and dredging at Grondines, Lotbinière and Ste. Croix, 1889 to June 30, 1899	829,583 08	486,971 79	3,558,733
Project of 1899 :—			
Dredging channel between Montreal and Quebec to 30 feet at lowest water of 1897, also widening to a minimum width of 450 feet, and straightening.			
Fiscal year 1899-1900	100,191 01	265,270 78	1,107,894
" 1900-1901	136,680 83	287,040 04	2,479,385
" 1901-1902	185,429 80	479,731 47	3,098,350
" 1902-1903	255,776 55	277,703 50	6,544,605
" 1903-1904	276,958 59	308,765 44	4,619,260
DEPARTMENT OF MARINE AND FISHERIES.			
Fiscal year 1904-1905	311,087 93	266,460 33	2,716,220
" 1905-1906	431,768 30	125,107 37	4,047,530
" 1906-1907, (July 1, '06, to March 31, '07)	302,677 37	80,613 26	3,001,010
" 1907-1908	478,209 66	179,339 78	4,831,875
" 1908-1809	497,686 03	209,636 55	5,896,737
	7,208,543 50	3,501,449 96	61,767,292

DREDGES.

Laval (No. 1).—Of the fleet of ship channel dredges this is the oldest. The hull is of wood, constructed in Ottawa in 1894. The buckets are made of cast-steel for work in rock and other hard material.

The dredge was hauled out on the slipway as soon as she came into winter quarters in the autumn of 1907 to have repairs made to her hull, which was also thoroughly caulked and tarred. The machinery was given a complete overhauling and put in good condition for the next season's work.

The details of the operation of this dredge for the fiscal year beginning April 1, 1908, were as follows:—

At the opening of the season of 1908 the dredge was taken down to Cap Levrard and laid out on May 12 where the *Baldwin (No. 6)* had left off the previous season, to widen and deepen the curve, the material consisting of clay and stones.

The *Laval* completed the work at the curve on August 1. She was then laid out on the south half of the Cap Levrard channel opposite the upper brick yards, below Cap Levrard, to widen and deepen the channel, the material being hard clay, stones and some sand. The dredge continued working there until November 10, when she

was taken up to Varennes and laid out on the upper part of the curve to deepen the channel to 35 feet at L.W. of 1897, the material being soft clay.

On November 25 the *Laval* was taken down to Sorel to go into winter quarters.

In a total of 167 days during which this dredge was at work, her machinery was in actual operation 65 per cent of the full working time.

The percentage of full working time for all the dredges would have been higher but for the unavoidable delays caused during the autumn by fog and smoke, which was the worst experienced, on record, and suspended all operations on the river for days at a time.

The total number of cubic yards removed amounted to 285,200 at a total cost of $45,768.08, or 16$^{04}/_{100}$ cents per cubic yard.

Laurier (No. 2).—The hull of this dredge is also of wood, having been constructed at the government ship-yard at Sorel in 1897. Her buckets are made of cast-steel, especially designed for work in rock and other hard material.

During the winter of 1907-8 this dredge was thoroughly overhauled and her machinery put in good order for the next season's work.

The details of the operations of this dredge for the fiscal year beginning April 1, 1908, were as follows:—

Dredge *No. 2* left Sorel on May 4, and was laid out at Champlain to clean up some lumps found in the channel by testing, the material being fine sand. She finished her work at Champlain on June 5, and was then taken down to Cap à la Roche and laid out on the curve where she had left off the previous season to widen and deepen the channel, the material being shale rock and very difficult to remove.

During the months of September and October the dredge lost a great deal of time owing to smoke and fog.

On November 10 *No. 2* was taken up to Varennes, where she commenced to deepen the channel to 35 feet at L.W. of 1897.

On November 23 the dredge broke down and was taken to Sorel and put into winter quarters.

The number of days during which this dredge was in operation was 172, and the percentage of time at actual work 62.

During the fiscal year she removed 132,650 cubic yards at a total cost of $45,596.77, or 34$^{37}/_{100}$ cents per cubic yard.

Lady Aberdeen (No. 3).—The hull of this dredge is of steel, the vessel complete, having been constructed at the Sorel works in 1900. The buckets are of cast-steel, specially designed for working in rock and other hard material.

During the winter, the dredge was given the usual overhauling.

The details of the operations of this dredge for the fiscal year beginning April 1, 1908, were as follows:—

On April 28 dredge *No. 3* left Sorel for Pointe aux Trembles to clean up a few lumps which had been found in the channel by testing, the material being sand and clay. She finished this work on May 27, and was taken down to Cap Charles and laid out on the curve on May 28, where she had left off the previous season, to widen and deepen the curve to 30 feet at L.W. of 1897, the material being shale rock and very difficult to remove. The progress was slower than during the previous season as the material was a great deal harder.

This dredge was very unfortunate in the way of accidents.

On June 3 she had a bad break in her main engine, which caused a delay of a few days.

On July 15 the upper tumbler shaft broke, which necessitated bringing up the dredge to Sorel for repairs. These were completed on the 22nd, and she was taken back to Cap Charles.

Dredge *No. 3* met with another bad accident on July 25, when her buckets came off the frame, which, on being lifted, was found to be very much bent and twisted. This made it absolutely necessary to bring the dredge up to Sorel. The damage was caused by the swell of passing steamers while the lower end of the frame was still resting on the river bottom.

On her arrival at Sorel on July 29, day and night shifts were put on to rush the repairs, the frame having to be practically rebuilt. These repairs were completed on August 20, and the dredge taken down to Cap Charles, where she continued working until November 6. The dredge was then taken up to Sorel to go into winter quarters and to be hauled up on the ways.

In a total of 137 days during which this dredge was at work, her machinery was in actual operation 58 per cent of the full working time.

The total quantity of material dredged amounted to 122,200 cubic yards, at a cost of $52,238.42 or 42$^{74}/_{100}$ cents per cubic yard.

Lady Minto (No. 4).—This dredge is of the same type and design as the *Lady Aberdeen,* her hull being also of steel, and her buckets of cast-steel for working in rock and other hard material.

During the winter of 1907-8, this dredge was given a thorough overhauling, and her machinery put in good order for the next season's work.

The details of the operations of this dredge for the fiscal year were as follows:—

The dredge left Sorel on April 28 for Pointe aux Trembles (*en haut*) where she was laid out to clean up some lumps found in the channel by testing, the material being clay and sand. When this was finished the *Lady Minto* was taken down to work at Cap Charles channel and laid out where she had left off the previous season, the material to be removed consisting of shale rock, hard clay, and stones. The dredge continued to work there until November 11, when she was taken up to Sorel and set to work to dredge a shoal which had formed opposite the new coal dock, at the shipyard, St. Joseph de Sorel. The dredging of this shoal was completed on November 14, and the *Minto* was taken down to work in the channel opposite Stone Island light to clean up some lumps found by testing. *No. 4* was taken into winter quarters on November 25.

Like all the other dredges of the fleet, *No. 4* lost a great deal of time during the autumn on account of smoke and fog.

In the 173 days of work, the actual operations were carried on for 67 per cent of the full working time, and 267,950 cubic yards were removed at a cost of $48,458.96 or 18$^{8}/_{100}$ cents per cubic yard.

Lafontaine (No. 5).—The hull of this dredge is of wood, the work of the Sorel shipyard, completed in 1901. Her buckets are made of cast-steel for working in rock and other hard material.

During the winter of 1907-8 she was given a thorough overhauling, and put in good shape for the next season's work. The details of the operations of this dredge for the fiscal year beginning April 1, 1908, were as follows:—

No. 5 left Sorel on May 4, and was taken down and laid out at Batiscan channel to remove some lumps found there and at the anchorage. The dredged material consisted of sand and stones.

The work at Batiscan was finished on May 21, when the dredge was taken to Cap à la Roche, and laid out to work on the curve where she continued operations until November 9, the material being shale rock. This dredge was then towed up river, and placed to work at Varennes curve, deepening the channel to 35 feet at L.W. of 1897, the material removed being soft clay.

The working time of Dredge *No. 5* was 173 days, the dredge being in actual operation 65 per cent of the full working time.

The total number of cubic yards removed, amounted to 160,500 at a cost of $49,056.65 or 30$^{56}/_{100}$ cents per cubic yard.

Baldwin (No. 6).—The hull of this dredge is of wood, constructed at the Sorel shipyard in 1902. She has large built-up buckets for work in soft material, but with sufficient teeth to enable the dredge to work in hard-pan, &c.

During the winter of 1907-8 the boilers of this dredge were thoroughly repaired, and her machinery was given a good overhauling.

The *Baldwin* left Sorel on May 4, and was laid out to work on Champlain channel the same day, to clean up sand bars which had formed.

This dredge continued working at Champlain channel until October 6, when she was taken down to Cap Levrard and laid out to straighten, deepen, and widen the Cap Levrard channel, the material consisting of clay and stones.

The *Baldwin* worked at Cap Levrard until November 13, when she was taken up to Ste. Anne de Sorel, and set to work on the traverse to deepen the channel to 35 feet at L.W. of 1897, the dredge material being soft clay.

No. 6 was taken into winter quarters on November 25.

The number of days during which this dredge was in operation was 173, and the percentage of time of actual work, 68.

The total number of cubic yards removed amounted to 390,500, at a cost of $49,157.43 or $12^{58}/_{100}$ cents per cubic yard.

J. Israel Tarte (No. 7).—This hydraulic dredge was constructed by the Polson Iron Works Company, of Toronto, Canada, in 1902.

The hull is of steel, of the same type and general design as the steel hulls of the elevator dredges.

During the winter of 1907-8 the dredge was given a good overhauling and repairs were made to her four boilers. Fifteen of the discharge-pipe pontoons were hauled out for caulking and painting.

At the commencement of the season of 1908, the *J. Israel Tarte* was placed at the mouth of the Richelieu river to do some filling at the new ship-yard coal wharf. This work she completed on May 9, and was then put into shape for work on Lake St. Peter. The dredge was laid out to begin operations on May 11 between the White buoy and No. 2 curves where she left off the previous season. Her work consisted of widening and deepening the channel, the dredge material being soft clay.

As with all other dredges of the fleet, unavoidable delays were caused during the autumn by fog and smoke.

After completing the widening and deepening between the White buoy and No. 2 curves, *No. 7* was laid out to widen and deepen the channel between No. 2 and No. 1 curves, the material also being soft clay. She completed this work on November 3, and as it was then too late in the season to consider placing the dredge to work above No. 3 curve, this part of the lake being very much exposed to bad weather, it was decided to start deepening No. 1 curve to 35 feet at L.W. of 1897.

No. 7 continued working at No. 1 curve until November 14. She was then given a thorough cleaning out before being put into winter quarters.

Notwithstanding the lost time on account of smoke and fog, the season's work was the most successful on record.

In a total of 163 days during which this dredge was at work, her machinery was in actual operation 70 per cent of the full working time.

The total number of cubic yards removed amounted to 3,209,237, at a total cost of $101,548.47, or $3^{16}/_{100}$ cents per cubic yard.

The total number of cubic yards removed by the dredging fleet between Montreal and Quebec during the fiscal year ending March 31, 1909, amounted to 4,568,237, at a total cost of $391,824.78, or $8^{57}/_{100}$ cents per cubic yard.

New Hopper-Hydraulic Dredge *Beaujeu (No. 8),* Steel Hull Twin-Screw.—The construction of this dredge was commenced at the Sorel ship yard in 1905. She was

launched in 1906, and delivered to the operating branch of the department on November 1, 1907.

The dredge was taken down to St. Thomas de Montmagny and placed to work on the St. Thomas channel, where she remained until November 15, 1907, when she was brought back to Sorel to go into winter quarters.

During the winter, alterations were made to the bow anchor winch, to give a quicker motion when winding up chain.

The machinery was given a thorough overhauling and put in good working order for the next season.

The *Beaujeu* left Sorel to begin her 1908 season's work on May 4. She was laid out to work on St. Thomas channel on May 6. On commencing, the dredge unfortunately broke her cutter-head shaft, which necessitated taking her up to Quebec for repairs. These having been completed by the 11th, she coaled up and returned to work at St. Thomas channel on the 13th, but on starting work the cutter-head shaft again broke. It was then decided to take the dredge up to Sorel and have repairs and certain alterations made.

No. 8 arrived at Sorel on the 18th of May, and the necessary repairs were completed by the 25th, when the *Beaujeu* left Sorel for St. Thomas channel, where she arrived the following day and immediately resumed work.

On June 3 this dredge was taken down to Beaujeu channel to remove some lumps composed of sand and clay which were found too difficult for the *Galveston* to pump.

No. 8 continued working at Beaujeu channel until June 13, when she returned to St. Thomas channel and worked very satisfactorily.

From August 12 to 19 the dredge was delayed for repairs to her cutter-head engine, and while these were being made her turbines had new lining put in.

From the 19th August until the 22nd of October the *Beaujeu* worked satisfactorily at St. Thomas channel, except for three short periods, when, on one occasion, she went down the Beaujeu channel to remove some material consisting of sand and clay which was found too difficult for *No. 9* to pump.

On October 22 *No. 8* was found to be making water; she was, therefore, taken up to Lévis to go into the dry dock for the necessary repairs to her hull. While in dock her boilers and machinery were given a thorough overhauling.

The *Beaujeu* came out of dry dock on November 5, and, after coaling, proceeded down to Beaujeu channel and resumed her work cleaning up lumps which were too hard for *No. 9*. The weather, however, became very unfavourable on account of the late season, and it was decided to put the dredge into winter quarters.

She left on the 6th November and reached Sorel the following day, when she was immediately laid up for the winter.

Notwithstanding the fact that 1908 was the first season for dredge *Beaujeu*, with an inexperienced crew, new machinery, &c., the results obtained have been most satisfactory, and the dredge has proved herself a credit to the Sorel shipyard.

The working time of *No. 8* was from daylight to dark, and the dredge was in actual operation 44 per cent of the full working time.

During the season the dredge worked 108 days at St. Thomas channel, and made 332 loads, which amounted to 651,800 cubic yards, the material consisting of clay and stones.

The dredge also worked twenty-seven days at Beaujeu channel, and made sixty-five loads, which amounted to 126,000 cubic yards, the material being sand, clay and stones.

The total number of days during which the dredge worked was 135, making 398 loads, or a total of 777,800 cubic yards, at a total cost of $57,801.88 or 7 43/100 cents per cubic yard.

Suction hopper dredge *Galveston (No. 9)* steel hull, twin screw.—During the winter of 1907-8, this dredge was given a thorough overhauling, and her machinery put in good order for the next season's work.

The details of the operations of this dredge for the fiscal year beginning April 1, 1908, were as follows:—

The *Galveston* left Sorel on May 5, for Quebec, where she arrived on the same day. She started for Beaujeu channel, Crane island, on the following morning, to commence operations.

During the season, the dredge was beached several times for repairs.

The *Galveston* worked at Beaujeu channel until November 7, when orders were received to proceed to Sorel to lay up for the winter.

No. 9 left Quebec on November 9, for Sorel. On the way up, the dredge was laid out at St. Croix Bar to make a trial load. The material was found to be very difficult to pump, being composed of very hard sand, with many stones.

No. 9 reached Sorel on November 12, and was immediately laid up for the winter.

During the season, the *Galveston* worked 159 days, her hours of operation being from daylight until dark. She was in actual operation 50 per cent of the full working time, and made 437 loads, amounting to 550,700 cubic yards, the material being sand, some soft blue clay and stones, at a total cost of $48,059.37, or $8\frac{72}{100}$ cents per cubic yard.

The total number of cubic yards removed by the *Beaujeau (No. 8)* and the *Galveston (No. 9)* below Quebec, during the fiscal year ending March 31, 1909, amounted to 1,328,500 at a total cost of $105,861.25 or $7\frac{96}{100}$ cents per cubic yard.

The total number of cubic yards removed by the whole of the dredging fleet amounted to 5,896,737, at a total cost of $479,686.03 or $8\frac{44}{100}$ cents per cubic yard.

Progress of dredging operations at the date of writing, the close of the season, 1908.

Locality.	Distance English miles.	Total length requiring dredging.	Length dredged in 1908.	Total length of 30 foot channel dredged.	Length yet to be dredged.
		Miles.	Miles.	Miles.	Miles.
Division 1:— Montreal to Sorel	45	22·90	.....	22·90	All completed.
Division 2:— Sorel to Batiscan	36	12·45	.....	12·45	All completed.
Division 3:— Lake St. Peter	20	18·00	4·22	*5·38 †12·62	All completed. 5·38 to be widened.
Division 4:— Batiscan to Quebec	59	10·00	0·80	5·25	4·75
Division 5:— Quebec to The Traverse	60	6·65	1·25	2·00	4·65
Total	220	70·00	6·27	60·60	9·40

* Not widened. † Widened.

PROGRESS of Dredging Operations at date of writing, the close of the season, 1908.

LOCALITY.	LENGTH OF DREDGING.		Cubic yards yet required to be done.
	Required.	Done.	
	Miles.	Miles.	
Division 1:—			
Longueuil Shoal		1·10	
Longue Pte. to Pte. aux Trembles (E.H.)		5·05	
Ile Ste. Thérèse		0·40	
Varennes to Cap. St. Michel		3·00	
Cap. St. Michel to Vercheres		4·50	
Vercheres Traverse		1 10	
Vercheres to Contrecoeur		1·70	
Contrecoeur Channel		6·05	
Total		22·90	
Division 2:—			
Sorel to Ile de Grace		4·40	
Stone Island		1·10	
Ile aux Raisins		0 25	
Lake St. Peter (see Div. 3)			
Port St. Francis		0·50	
Three Rivers		0·50	
Cap. Madeleine to Becancour		1·55	
Becancour to Champlain		2·25	
Champlain to Pte. Citrouille		1·30	
Batture Perron		0·60	
Total		12·45	
Division 3:—			
Lake St. Peter		*5·38 †12·62	3,300,000
Total		18·00	3,300,000
Division 4:—			
Batiscan to Cap Levrard	0·20	2·80	50,000
Cap à la Roche Channel	1·10	0·90	500,000
Pouiller Rayer	0·80	0·40	175,000
Cap Charles	0·65	0·25	210,000
Grondines	0·80		200,000
Lotbiniere		0·40	
Cap Santé		0·20	
Ste. Croix	0·60	0·30	150,000
St. Augustin	0·60		150,000
Total	4·75	5·25	1,435,000
Division 5:—			
Quebec to the Traverse	4·65	2·00	3,200,000
Total	4·65	2·00	3,200,000
Totals	9·40	60·60	7,935,000
Cubic yards yet to be done			7,935,000
Cubic yards done			61,767,292
Total			69,702,292

*Not widened. †Widened.

RIVER ST. LAWRENCE SHIP CHANNEL.

CLASSIFICATION of Disbursements for Fiscal Year ended March 31, 1909.

Vessels.	Fuel.	Wages.	Board.	Stores and material.	Repairs and labour.	Expenditure: new plant, rebuilding shipyards, &c.	Proportion of general and office expenses, &c.	Expenditure for each vessel.	Stone-lifter service, &c., floating shop, elevator dredges.	Tug service.	Inspection towing, sweeping, &c.	Total cost of operations of each dredge and plant during Fiscal Year.	Total expenditure on different appropriations.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Dredge *Laval* (No. 1).....	5,510 23	7,784 97	2,797 98	2,729 36	10,185 59	.....	1,537 48	30,545 61	1,177 59	9,663 85	4,381 03	45,768 08	
Tug *Portneuf*.....	2,135 92	3,596 98	1,431 39	880 08	1,133 04	.....	486 44	9,663 85	.....	.....	.....	.....	
Dredge *Laurier* (No. 2).....	5,554 72	7,695 95	2,834 59	3,415 61	6,808 21	.....	1,394 43	27,703 51	1,177 59	12,334 64	4,381 03	45,596 77	
Tug *Cartier*.....	2,392 57	3,968 05	1,627 10	966 42	2,759 63	.....	620 87	12,334 64	.....	.....	.....	.....	
Dredge *Lady Aberdeen* (No. 3)	4,639 16	7,519 30	2,771 49	2,974 53	15,673 24	.....	1,789 66	35,367 38	1,177 59	11,312 42	4,381 03	52,238 42	
Tug *Emilia*.....	2,347 42	3,552 67	1,402 76	958 94	2,481 21	.....	569 42	11,312 42	.....	.....	.....	.....	
Dredge *Lady Minto* (No. 4)..	5,236 26	7,764 66	2,920 17	2,715 15	11,089 44	.....	1,575 50	31,301 18	1,177 59	11,599 16	4,381 03	48,458 96	
Tug *Champlain*.	2,170 72	3,782 97	1,508 33	1,058 41	2,494 88	.....	583 85	11,599 16	.....	.....	.....	.....	
Dredge *Lafontaine* (No. 5)...	6,287 07	7,629 87	2,910 87	2,708 18	8,312 98	.. ..	1,476 03	29,325 00	1,177 59	14,173 03	4,381 03	49,056 65	
Tug *Lac St. Pierre*.....	3,303 45	4,102 82	1,701 05	1,468 66	2,883 65	.....	713 40	14,173 03	.....	.....	.....	.....	
Dredge *Baldwin* (No. 6).....	5,914 36	7,613 40	2,837 48	2,238 00	10,017 26	.....	1,516 93	30,137 43	1,177 58	13,461 39	4,381 03	49,157 43	
Tug *St. Jean d'Iberville*....	2,437 21	3,977 84	1,664 99	1,005 64	3,698 13	.....	677 58	13,461 39	.....	.....	.....	.....	
Dredge *J. Israel Tarte* (No. 7)	31,535 15	14,755 48	4,915 23	5,504 82	14,408 96	.....	3,769 38	74,889 02	.....	17,897 41	8,762 04	101,548 47	
Tug *Montcalm*.....	1,949 43	4,364 22	1,730 65	886 23	2,445 25	.....	603 49	11,989 27	.....	.....	.....	.....	
" *Carmelia*.....	1,269 77	2,202 15	759 85	543 61	1,835 35	....	297 41	5,908 14	.....	.....	.....	.....	
Dredge *Beaujeu* (No. 8).....	10,386 01	11,340 60	3,230 92	3,692 40	14,682 56	.....	2,296 66	45,629 15	.....	7,791 70	4,381 03	57,801 88	
" *Galveston* (No. 9).....	8,473 67	9,539 15	2,722 21	4,627 61	8,717 70	..... .	1,806 30	35,886 64	.....	7,791 70	4,381 03	48,059 37	
Tug *Jas. Howden* — Divided equally between Nos. 3 & 9.	3,324 04	4,844 19	2,243 57	2,055 83	2,331 38	.....	784 39	15,583 40	.....	.....	.....	....	
													497,686 03
Tug *Jessie Hume* — Divided $\frac{1}{10}$ to each elevator dredge. Add $\frac{1}{5}$ to hydraulic dredge No. 7. Add $\frac{1}{10}$ each to dredge Nos. 8 & 9	1,664 12	2,397 97	837 69	697 27	1,852 37	.....	394 86	7,844 28	.....	.....	.....	.....	
Str. *Frontenac*..	3,032 38	5,967 94	3,015 33	3,474 86	2,742 11	.....	966 37	19,198 99	... .	....	.....	.....	
Str. *De Lévis*....	2,863 76	4,956 92	2,512 65	2,859 47	2,730 25	....	843 96	16,767 01	.....	....	.....	.....	

RIVER ST. LAWRENCE SHIP CHANNEL—*Continued.*

CLASSIFICATION of Disbursements for Fiscal Year ended March 31, 1909—*Concluded.*

Vessels.	Fuel.	Wages.	Board.	Stores and materials.	Repairs and labour.	Expenditure: new plant, rebuilding shipyards, &c.	Proportion of general and office expenses, &c.	Expenditure for each vessel.	Stone-lifter service, &c., floating shop, elevator dredges.	Tug service.	Inspection towing, sweeping, &c.	Total cost of operations of each dredge and plant during Fiscal Year.	Total expenditure on different appropriations.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Stone lifter No. 2 } Divided equally	25 16	1,281 14	281 76	507 52	1,093 56	.....	169 06	3,358 20	.....	.....	.....	.....	
" No. 3 } between	.....	1,065 29	414 84	536 79	496 15	.....	133 23	2,646 30	.....	.....	.....	.....	
Floating shop ... } elevator dredges.	207 00	387 40	145 47	252 30	15 42	.....	53 44	1,061 03	.....	.....	.....	.....	
Str. *Lady Grey* (ice breaking and emergency tug)	6,434 06	12,666 80	4,714 80	5,761 14	8,365 00	.....	2,010 96	39,952 76	.....	.....	.....	.....	39,952 76
Construction for dredging fleet—													
Floating machine shop	.....	.....	.....	.....	.....	3,445 05	.....	.....	.....	.....	.....	.....	
Str. *De Lévis*, steering gear	.....	.....	.....	.....	.....	594 73	.....	.....	.....	.....	.....	.....	
Tug *Jessie Hume* "	.....	.....	.....	.....	.....	681 12	.....	.....	.....	.....	.....	.....	
Construction 2 flat scows 50 feet	.....	.....	.....	.....	.....	1,168 14	.....	.....	.....	.....	.....	.....	
Construction 1 flat scow 60 feet	.....	.....	.....	.....	.....	3,214 06	.....	.....	.....	.....	.....	.....	
Construction 1 pontoon anchor scow	.....	.....	.....	.....	.....	7,408 90	.....	.....	.....	.....	.....	.....	
Construction 2 dump scows 200 cubic yds.	.....	.....	.....	.....	.....	26,704 93	.....	.....	.....	.....	.....	.....	
Reconstruction dump scows Nos. 8 & 10	.....	.....	.....	.....	.....	4,474 10	.....	.....	.....	.....	.....	.....	47,691 03
Improvements to Sorel shipyard—													
Boiler shop, new tools and machinery	.....	.....	.....	.....	.....	9,930 95	.....	.....	.....	.....	.....	.....	
Machine shop, new tools and machinery	.....	.....	.....	.....	.....	250 76	.....	.....	.....	.....	.....	.....	
Saw mill, new tools and machinery	.....	.....	.....	.....	.....	1,593 54	.....	.....	.....	.....	.....	.....	

Pipe and asbestos shop, new tools and machinery						252 57							
Carpenters' shop, new tools and machinery						252 28							
Slipway, winch and diving outfit						1,981 98							
Spare floats, scows, &c.						1,247 28							
Telephone						337 80							
Air and steam plant						2,427 25							
Shipyard railway						4,107 38							
New offices						159 33							
Wharf No. 4						3,986 21							
Building No. 19, patterns						214 50							
" No. 20, dry lumber shed						2,597 40							
Building No. 21, fire hole No. 2						5,425 85							
Building No. 22, shed for castings						3,808 23							
Building No. 23, dry-kiln shed						4,185 41							42,758 72
Stores and materials													79,234 04
	119,093 64	144,758 73	53,933 17	54,518 83	138,263 32	90,449 75	27,071 10	537,638 79	7,065 53	106,025 30	43,810 28	497,686 03	707,322 58

RIVER ST. LAWRENCE SHIP CHANNEL—*Continued.*

DETAILS of Dredging, Locality and Cost per Cubic Yard.

Dredges.	Total cost of operations of each dredge and plant during Fiscal Year.	Number of days in operation each dredge.	Cost per day, operations of dredges and plant.	Days working each locality.	Cost of work, each locality.	Total cost of operations of each dredge.	Number of cubic yards dredged in each locality.	Total cubic yards for each dredge.	Cost per cubic yard, each locality.	Average cost per cubic yard for each dredge.	Kind of material dredged.	Locality of dredging.
	$ cts.		$ cts.		$ cts.	$ cts.			Cts.	Cts.		
Laval (No. 1).....	45,768 08	167	274 06	154	42,205 29	.....	261,600	.....	16·13	.....	Hard clay, stones and sand.	Cap Levrard Channel.
				13	3,562 79	.....	23,600	.....	15·09	.....	Soft clay	Varennes Curve.
						45,768 08		285,200		16·04		
Laurier (No. 2).....	45,596 77	172	265 09	27	7,157 64	.....	18,300	.....	39·11	.....	Sand (cleaning up).....	Champlain.
				133	35,257 97	.....	103,150	.....	34·18	.....	Shale rock.....	Cap à la Roche Curve.
				12	3,181 16	.....	11,200	.....	28·40	.....	Soft clay	Varennes Traverse.
						45,596 77		132,650		34·37		
Lady Aberdeen (No. 3)	52,238 42	137	381 30	26	9,913 87	.....	35,400	.....	28·00	.....	Clay and sand	Pte. aux Trembles Channel.
				111	42,324 55	.....	86,800	.....	48·76	.....	Shale rock and stones ...	Cap Charles Curve.
						52,238 42		122,200		42·74		
Lady Minto (No. 4)...	48,458 96	173	280 10	15	4,201 94	.....	14,200	.....	29·59	.....	Clay and sand	Pte. aux Trembles Channel.
				151	42,296 10	.....	239,150	.....	17·68	.....	Shale rock and stone	Cap Charles Channel.
				7	1,960 92	.....	14,600	.....	13 43	.....	Soft clay (cleaning up)...	Stone Island.
						48,458 96		267,950		18·08		
Lafontaine (No. 5)....	49,056 65	173	283 56	15	4,253 47	.....	10,050	.....	42·32	.....	Clay and stones.....	Batiscan Channel.
				143	40,549 71	.....	138,900	.....	29·19	.....	Shale rock.....	Cap à la Roche Curve.
				15	4,253 47	.....	11,550	.....	36·82	.....	Soft clay.....	Varennes Traverse.
						49,056 65		160,500		30·56		
Baldwin (No. 6).....	49,157 43	173	284 14	131	37,223 19	....	318,500	.....	11·68	.....	Sand (cleaning up) ...	Champlain Channel.
				32	9,092 75	... .	39,300	.....	23·13	... .	Hard clay, stones and sand.	Cap Levrard Channel.
				10	2,841 49	.....	32,700	.....	8·68	.....	Soft clay	Ste. Anne Traverse.
						49,157 43		390,500		12·58		
J. Israel Tarte (No. 7)	101,548 47	163	622 99	148·	92,203 52	.....	3,166,250	.....	2.91	. ...	Soft blue clay.....	White Buoy to Curve No. 1
				15	9,344 95	.....	42,987	.....	21·73	.....	"	Curve No. 1 L. S. P.
						101,548 47		3,209,237		3·16		

Beaujeu (No. 8)....	57,801 88	135	428 16	27	11,560 38	....	126,000	.....	9·17	.....	Sand, soft blue clay and stones.	Beaujeu Channel.
				108	46,241 50	... .	651,800	.....	7·09	.....	Clay and stones.....	St. Thomas Channel.
						57,801 88		777,800		7·43		
Galveston (No. 9).....	48,059 37	159	302 26	159	48,059 37	....	550,700	.....	8·72	.....	Soft blue clay and stones.	Beaujeu Channel.
						48,059 37		550,700		8·72		
	497,686 03	1,452	.. ..	1 452	497,686 03	497,686 03	5,896 737	5,896,737				

ABSTRACT of work of Dredging Fleet during the Fiscal Year ended March 31, 1909.

Dredge.	Locality of Dredging.	Time of Service.	Nominal working time, 24 hours per day.	Hours actual dredging.	Number of scows filled.	Number of cubic yards dredged (scow measurement.)	Depth of dredging at low water.		Width in feet.	Character of Soil.	Remarks.
		Days.	Hours.				Ft.	In.	Feet.		
Laval (No. 1).....	Cap Levrard (curve and channel).....	154	3,384	2,222¾	1,579	261,600	30	0	450 to 600	Hard clay and stones and some sand.....	Capt. P. Matte.
	Varennes Curve.....	13	288	161	118	23,600	35	0	500	Soft clay.....	
		167	3,672	2,383¾	1,697	285,200					
Laurier (No. 2)...	Champlain.....	27	600	435¼	122	18,300	30	0	450	Sand, cleaning up.....	Capt. O. Gendron.
	Cap à la Roche Curve.	133	2,916	1,778½	669	103,150	30	0	450 to 550	Shale rock.....	
	Varennes Traverse...	12	264	114½	56	11,200	35	0	500	Soft clay.....	
		172	3,780	2,328¼	847	132,650					
Lady Aberdeen (No. 3).	Pointe aux Trembles Channel.....	26	576	395½	177	35,400	30	0	450	Clay and sand.....	Capt. O. Gaucher.
	Cap Charles Curve...	111	2,436	1,330¾	434	86,800	30	0	600	Shale rock and stones...	
		137	3,012	1,726¼	611	122,200					
Lady Minto (No. 4)....	Pointe aux Trembles Channel.....	15	336	200¾	71	14,200	30	0	450	Clay and sand	Capt B. Ladebauche.
	Cap Charles Channel.	151	3,312	2,263¾	206¼	239,150	30	0	450	Shale rock and stones....	
	Stone Island.....	7	156	87¾	73	14,600	30	0	450	Soft clay.....	Cleaning up.
		173	3,804	2,552¼	350¼	267,950					

Lafontaine (No. 5)	Batiscan Channel	15	336	206½	33½	10,050	30	0	450	Clay and stones.....	Capt. A. Marcotte.
	Cap à la Roche Curve.	143	3,132	2,102	463	138,900	30	0	450 to 550	Shale rock..... ...	
	Varennes Traverse...	15	336	168½	38½	11,550	35	0	500	Soft clay.....	
		173	3,804	2,477	535	160,500					
Baldwin (No. 6).	Champlain Channel..	131	2,880	2,087¾	1,078	318,500	30	0	450	Sand.....	Capt. L. Dauphinais
	Cap Levrard Channel.	32	708	360	131	39,300	30	0	450	Hard clay and stones, some sand.....	Cleaning up.
	Ste. Anne Traverse ..	10	216	139	109	32,700	35	0	450	Soft clay.....	
		173	3,804	2,586¾	1,318	390,500					
J. Israel Tarte (No. 7).	Lake St. Peter White Buoy to Curve No. 1.	148	3,252	2,249	....	3,166,250	30	0	450	Soft blue clay.....	Capt. J. S. Michaud ....
	Curve No. 1.....	15	336	50	.....	42,987	35	0	660	" "	
		163	3,588	2,299	.....	3,209,237					
					No. of Loads.						
Beaujeu (No. 8).....	Beaujeu Channel.....	27	.....	.....	65¾	126.000	30	0	1,000	Sand, some soft blue clay and stones.....	Capt. A. Bourget.
	St. Thomas Channel..	108	.....	.....	332¾	651,800	30	0	1,000	Clay and stones.....	
		135	.....	.....	398½	777,800					
Galveston (No. 9).....	Beaujeu Channel.....	159	.....	.....	437	550,700	30	0	1,000	Sand, some soft blue clay and stones	Capt. Z. Caron.
		... .	.....	.....	.....	5,896,737					

DREDGING PLANT.

The following is a description of the dredging plant in November, 1908, owned and operated by the Department of Marine and Fisheries in connection with the River St. Lawrence ship channel:—

DREDGES.

The Elevator Dredge 'Laval' (No. 1), wooden hull.

Length over all, 150 feet.
Breadth of beam, 30 feet.
Depth of hold, 14 feet.
Average draught, 11 feet.
Greatest working depth, 42 feet.
Hull built in Ottawa in 1894.
Steel buckets.
Working capacity per day in hard material, 1,000 or 2,000 c. yds.

The Elevator Dredge 'Laurier' (No. 2), wooden hull.

Length over all, 163 feet.
Breadth of beam, 32 feet.
Depth of hold, 14 feet.
Average draught, 10 feet.
Greatest working depth, 45 feet.
Built at Sorel shipyard in 1897.
Steel buckets.
Working capacity per day in hard material, 1,000 to 2,000 c. yds.

The Elevator Dredge 'Lady Aberdeen' (No. 3), steel hull.

Length over all, 148 feet.
Breadth of beam, 32 feet.
Depth of hold, 13 feet.
Average draught, 8·5 feet.
Greatest working depth, 42·5 feet.
Built at Sorel shipyard in 1900.
Steel buckets.
Working capacity per day in hard material, 1,000 to 2,000 c. yds.

The Elevator Dredge 'Lady Minto' (No. 4), steel hull.

Length over all, 148 feet.
Breadth of beam, 32 feet.
Depth of hold, 13 feet.
Average draught, 8·5 feet.
Greatest working depth, 42·5 feet.
Built at Sorel shipyard in 1900.
Steel buckets.
Working capacity per day in hard material, 1,000 to 2,000 c. yds.

The Elevator Dredge 'Lafontaine' (No. 5), wooden hull.

Length over all, 168 feet.
Breadth of beam, 32 feet.
Depth of hold, 14 feet.
Average draught, 9 feet.
Greatest working depth, 45 feet.
Built at Sorel shipyard in 1901.
Steel buckets.
Working capacity per day in hard material, 1,000 to 2,000 c. yds.

The Elevator Dredge 'Baldwin' (No. 6), wooden hull.

Length over all, 165 feet.
Breadth of beam, 34 feet.
Depth of hold, 14 feet.
Average draught, 8 feet.
Greatest working depth, 42·5 feet.
Built at Sorel shipyard in 1902.
1 cubic yard buckets strengthened for fairly hard material.
Working capacity per day in medium material, 2,500 to 3,500 c. yds.

The Hydraulic Dredge 'J. Israel Tarte' (No. 7), steel hull.

Length over all, 160 feet.
Breadth of beam, 42 feet.
Depth of hold, 12·5 feet.
Average draught, 6 feet.
Length of suction frame, 80 feet.
Greatest working depth, 50 feet.
Built at the Polson Iron Works, Toronto, in 1902.
Working capacity per day in soft material, 12,000 to 20,000 c. yds.

Discharge Pipe and Pontoons of Dredge 'J. Israel Tarte' (No. 7).

23 lengths of pipe, 36 ins. diameter by 100 feet long.
1 length of pipe, 36 ins. diameter by 35 feet long.
23 pairs of pontoons for floating pipes, 42 ins. diam. by 90 ft. long.

Winch Scow 'No. 3' for Dredge 'J. Israel Tarte' (wooden hull).

Length over all, 60 feet.
Breadth of beam, 18 feet.
Depth of hold, 6 feet.
Built at Sorel shipyard in 1902.

Winch Scow (wooden hull) for Dredge 'J. Israel Tarte' (with steam boiler and steam winch).

Length over all, 75 feet.
Breadth of beam, 25 feet.
Depth of hold, 5·5 feet.
Built at Sorel shipyard in 1902.

The Suction Hopper Dredge 'Galveston' (No. 9), steel hull, twin-screw.

Length over all, 233 feet.
Breadth of beam, 39 feet.
Depth of hold, 15 feet 5 inches.
Draught when loaded with 1,800 tons, 14 ft. 9 in. aft. 13 ft. 1 in. fwd.
Greatest working depth, 55 feet. Built in 1904.
Two suction pumps, Dutch type 8 ft. 6 ins. outside diameter.
Working capacity, 1,350 cubic yards in 45 minutes.
Hopper capacity, 1,400 cubic yards.

Sea-going Suction Hopper Dredge 'Beaujeu' (No. 8), steel hull twin screw

Length between perpendiculars, 264 feet.
Breadth of beam, 45 feet.
Depth of hull, 20 feet.
Capacity of hoppers, 2,000 cubic yards in 45 minutes.
Greatest working depth, 65 feet.
Draught when loaded, 15 feet.
Ordinary speed, 9 statute miles.
Built at Sorel shipyard in 1907.

TUGS.

The Ice-breaking and Sweeping Tug 'Lady Grey' (steel hull, twin screw).

Length between perpendiculars, 172 feet.
Length over all, 183 feet 6 inches.
Breadth moulded, 32 feet.
Breadth extreme, 32 feet 3 inches.
Depth moulded, 18 feet.
Draft mean to bottom of flat plate keel (normal) 12 feet.
Draft when ice-breaking, about 13 feet.
Displacement in tons at 12 foot draught, 1,070.
Mean speed at 12 foot draft on 6 runs over measured mile base, 14 knots.
Built by Vickers Sons & Maxim, Ltd., Barrow-in-Furness in 1906.

The Tug 'Frontenac' (composite hull).

Length over all, 113 feet.
Breadth of beam, 23 feet.
Depth of hold, 10 feet.
Average draught, 9 feet.
Built at Sorel shipyard in 1902.

The Tug 'De Levis' (wooden hull).

Length over all, 104 feet.
Breadth of beam, 20 feet.
Depth of hold, 10 feet.
Average draught, 8 feet.
Built at Sorel shipyard in 1902.

The Tug 'James Howden' (wooden hull).

Length over all, 100 feet.
Breadth of beam, 21 feet.
Depth of hold, 10 feet.
Average draught, 7·5 feet.
Built at Sorel shipyard in 1903.

The Tug 'St. Jean d'Iberville' (steel hull).

Length over all, 90 feet.
Breadth of beam, 18 feet.
Depth of hold, 12 feet.
Average draught, 10 feet.
Built at Sorel shipyard in 1897.

The Tug 'Lac St. Pierre' (wooden hull).

Length over all, 100 feet.
Breadth of beam, 21 feet.
Depth of hold, 10 feet.
Average draught, 7·6 feet.
Built at Sorel shipyard in 1901.

The Tug 'Portneuf' (wooden hull).

Length over all, 84 feet.
Breadth of beam, 17 feet.
Depth of hold, 9 feet.
Average draught, 8 feet.
Built in 1875.

The Tug 'Cartier' (wooden hull).

Length over all, 84 feet.
Breadth of beam, 18 feet.
Depth of hold, 9·5 feet.
Average draught, 8 feet.
Built at Sorel shipyard in 1893.

The Tug 'Emilia' (wooden hull).

Length over all, 84 feet.
Breadth of beam, 17 feet.
Depth of hold, 9 feet.
Average draught, 8 feet.
Built at Sorel shipyard in 1898.

The Tug 'Champlain' (wooden hull).

Length over all, 84 feet.
Breadth of beam, 17 feet.
Depth of hold, 9 feet.
Average draught, 8 feet.
Built at Sorel shipyard in 1901.

The Tug 'Jessie Hume' (wooden hull).

Length over all, 72 feet.
Breadth of beam, 17·3 feet.
Depth of hold, 10 feet.
Average draught, 8·5 feet.
Built in Buffalo in 1878.

The Tug 'Montcalm' (wooden hull).

Length over all, 80 feet.
Breadth of beam, 23 feet.
Depth of hold, 8 feet.
Average draught, 7 feet.
Built at Sorel shipyard in 1903.

The Tug 'Carmelia' (wooden hull).

Length over all, 84 feet.
Breadth of beam, 17 feet.
Depth of hold, 9 feet.
Average draught, 8 feet.
Purchased in 1903.

COAL BARGES.

The Coal Barge 'No. 1' (wooden hull).

Length over all, 120 feet.
Breadth of beam, 24 feet.
Depth of hold, 10 feet.
Built in Sorel shipyard in 1898.

The Coal Barge 'No. 2' (wooden hull).

Length over all, 125 feet.
Breadth of beam, 25 feet.
Depth of hold, 11 feet.
Built at Sorel shipyard in 1900.

The Coal Barge 'No. 3' (wooden hull).

Length over all, 98 feet.
Breadth of beam, 28 feet.
Depth of hold, 12 feet.
Built at Sorel shipyard in 1902.

The Coal Barge 'No. 4' (wooden hull).

Length over all, 98 feet.
Breadth of beam, 28 feet.
Depth of hold, 12 feet.
Built at Sorel shipyard in 1903.

Stone-lifter 'No. 2' (wooden hull).

Length over all, 80 feet.
Breadth of beam, 25 feet.
Depth of hold, 9·8 feet.
Rebuilt at Sorel shipyard in 1897.

Stone-lifter 'No. 3' (wooden hull).

Length over all, 108 feet.
Breadth of beam, 34 feet.
Depth of hold, 14 feet.
Built at Sorel shipyard in 1903.

Sounding Scow (wooden hull).

Length over all, 60 feet.
Breadth of beam, 25 feet.
Depth of hold, 6 feet.
Built at Sorel shipyard in 1898.

Floating Shop (wooden hull).

Length over all, 90 feet, 4 inches.
Breadth of beam, 25 feet.
Depth of hull, 9 feet.
1 forge, 1 shaper, 1 emery wheel, 1 drill, 1 lathe, 1 gasoline, 6 h.p. engine.
Living quarters for 4.
Built in 1908 at Sorel shipyard.

Two Boarding Scows (wooden hulls).

Length over all, 60 feet.
Breadth of beam, 18 feet.
Depth of hull, 7 feet.
Built in 1908, at Sorel shipyard.

One Boarding Scow (wooden hull).

Old dump scow.
Rebuilt in 1899.

Two Hopper Scows (wooden hulls) with hydraulic power for closing gates.

Length over all, 97 feet.
Breadth of beam, 24·5 feet.
Depth of hold, 9 feet.
Capacity, 200 cubic yards.
Built at Sorel shipyard in 1897.

Two Hopper Scows (wooden hulls) with hydraulic power for closing gates.

Length over all, 90 feet.
Breadth of beam, 18 feet.
Depth of hold, 7 feet.
Capacity, 150 cubic yards.
Built at Sorel shipyard in 1898.

Four Hopper Scows (wooden hulls) with hydraulic power for closing gates.

Length over all, 97 feet.
Breadth of beam, 24 feet.
Depth of hold, 9 feet.
Capacity, 200 cubic yards.
Built at Sorel shipyard in 1899 and 1901.

Five Hopper Scows (wooden hulls) with hydraulic power for closing gates.

Length over all, 98 feet.
Breadth of beam, 24 feet.
Depth of hold, 9·5 feet.
Capacity, 300 cubic yards.
Built at Sorel shipyard, two in 1901, three in 1902.

Two Hopper Scows (wooden hulls) with hydraulic power for closing gates.

Length over all, 97 feet.
Breadth of beam, 24·5 feet.
Depth of hold, 9 feet.
Capacity, 300 cubic yards.
Built at Sorel shipyard in 1903.

Two Small Flat Scows (wooden hulls) used at the Sorel Shipyard.

20 feet by 40 feet.
One of these with a derrick of five tons lifting capacity.

APPENDIX No. 4.

SOREL SHIPYARD.

G. J. DESBARATS, Esq.,
Acting Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to report on the work performed at the Sorel shipyard during the twelve months of year 1908-9, ended March 31 last.

SPRING WORK, 1908.

The opening of the fiscal year finds the shipyard busy to its full capacity. The wintering of a large dredging fleet and many other vessels is over. Most of the important repairs have been completed in the various shops and the new pieces of machinery or old ones repaired are put on board.

April is devoted to outfitting the several vessels of the dredging fleet, overhauling all the machinery, cleaning and painting, and then to putting on board all necessary supplies and, in the meantime, taking on the crews with their belongings.

In April, 1908, there were at the shipyard the following craft:—

Six elevator dredges, numbered from one to six.

One suction dredge, known as No. 7, with cutter head and discharge pipes.

One suction dredge, known as No. 8, with cutter head, carrying her own load and self-propelling.

One suction hopper dredge, known as No. 9, also self-propelling.

Nine tugs employed as tenders for the above mentioned dredges:—

The *Lac St. Pierre, St. Jean Iberville, Montcalm, Portneuf, Champlain, Cartier, Emilia, Carmelia, Jessie Hume.*

Three other twin screw wooden boats, to do towing, as well as survey work, sweeping of the channel, and official duty: the *De Lévis,* the *James Howden* and *Frontenac.*

Fifteen dumping scows, numbered from one to fifteen, to serve the elevator dredges.

The discharge pipe of dredge *No. 7,* consisting of 2,200 feet of pontoons in 100 feet lengths.

Two stone lifters, used as a complement to the dredging fleet and capable of hauling the largest boulders.

Four coal barges, Nos. 1 to 4, of about 375 tons capacity each, continually busy distributing coal to the dredges and tugs, during the season of navigation.

One floating shop kept within reach of the group of dredges for minor repairs.

Three scows with housing on them, serve to lodge the spare crews of the boats, where accommodation is scarce.

Besides the above mentioned craft which had wintered at the Sorel yard, there were also:—

La Canadienne, a vessel of the Hydrographic Survey; the *Shamrock* and *Acetylene,* of the Maintenance of Lights branch; the *Vercheres, Hosanna* and *Alpha,* three vessels employed in the construction-of-lights branch; the *Maisonneuve* of the Hydrographic Survey.

In April, 1908, all of the above vessels were, as I said, being outfitted, overhauled and made ready for the season's work.

The ice of the Richelieu river went, on April 8, and that of the St. Lawrence on April 17. The first dredge to leave the shipyard was the *No. 3* on May 6.

CONSTRUCTION.

In addition to the work required on the vessels of the fleet, there was also the work on the new constructions.

Those on hand at the beginning of the fiscal year were dredge *No. 19,* dipper dredge; tug *No. 22,* for the upper lakes; one floating shop.

Work on the dipper dredge was continued through the whole fiscal year. The vessel was launched in July, 1908, and then the installation of her machinery was begun.

At the same time as the machinery of *No. 19* was being completed, that of *No. 24,* which is to be a duplicate of the first, was kept in hand.

At the end of the fiscal year the main hoisting engine on *No. 19* had been installed, as well as the spud-lifting engines, swinging engine, Wheeler condenser, feed pump and dynamo.

Tug *No. 22,* by April 1, 1908, had her hull almost completed and her woodwork well advanced. The machinery was installed on board, her propeller shafts lined and put in place, her propellers shipped, and on September 25 she was successfully launched. Her installation continued, and in December was far enough advanced to have a trial of her engines in place. By the end of March the vessel was nearing completion.

The name chosen for the new craft known hitherto as *No. 22* was *Lambton,* from the family name of Lord Durham of historical fame.

The floating shop was equipped with a 6-horse power Foos gasoline engine, stationary type, and with shafting and belting, lathe, shaper, drill, emery wheel, smith's forge, blower and necessary tools.

The floating shop was put to actual work in the month of August, 1908, and is found a great convenience for urgent ordinary repairs. One end is set apart as living room for the foreman, a blacksmith.

NEW CONSTRUCTIONS.

Construction No. 20, a stone lifter. Material was received, machinery prepared.

Lighthouse Tender No. 21, although begun in previous year, was, properly speaking, put in hand in 1908, her keel being laid in July of that year.

Dimensions.

The length is 222 feet over all.
Beam moulded, 34 feet 8 inches.
Depth moulded, to upper deck 22 feet.
Draught, when loaded, 15 feet.
Estimated speed, 11½ knots.

The vessel is of steel throughout, has a double bottom 3 feet deep extending through machinery space and bunker, subdivided in three water-tight compartments, that under the boilers forming the reserve feed tank. There are six water-tight bulkheads.

The *No. 21* will be propelled by twin triple expansion engines with cylinders 15 in. 24 in. and 39 in. diameter, respectively, and a common stroke of 24 inches.

The steam is supplied by two marine boilers of the return tube type, 14 feet diameter by 10 feet long.

There is also a donkey boiler of the vertical type, 5 feet diameter by 9 ft. 2 in. high.

Two flat scows under No. 27 were begun in May, 1908; these scows are 63 feet by 27 by 8.

Construction No. 28 consisted of two wooden scows, capacity 200 c. yds. One is equipped with the government pattern of hopper doors and hinges, the other has the same design as the Harbour Commissioners' scows, the doors being reinforced by an I-beam and the hinges somewhat different.

In both these scows, as in the whole fifteen others already in commission, the doors are operated by means of hydraulic pressure supplied by a pump on board the tug, and carried through a hose to the ram located within the hold of the scow. This works a shaft and opens or shuts the four pairs of doors at the bottom of the hoppers.

Construction No. 29 is a wooden tug of light draft. A model was worked out in September, 1908. The framing was begun in November.

This tug is to have twin-screws and double expansion engines of the type of the *Emilia*. At the end of the fiscal year, the framing of the hull was completed and the planking fairly advanced. The engine frames, cylinders, and several other pieces of the machine were cast.

Construction No. 30. This is a derrick scow for work on the Ottawa river. The scow is 40 feet by 16 feet by 4 feet, carries a stiff leg derrick, with boom of 25 feet and a hand winch. There is a cabin on deck of 8 feet by 10. This scow was built during winter of 1909 for the *Maisonneuve*. At the beginning of April of this year, there remained some painting to be done and a few items of outfitting.

SUMMER WORK, 1908.

Reverting to the vessels of the dredging fleet, these were as usual, kept in efficient working order throughout the season of navigation.

The *De Lévis* was hauled on the slipway for repairs to her rudder.

Dredge No. 3 was brought to the shipyard to have a new upper tumbler installed. Some weeks later, the same dredge through an accident, had her frame broken, which called for extensive repairs.

The tug *Jessie Hume* was also hauled out for painting, and securing the iron sheeting at water line.

VESSELS HAULED OUT, ETC.

The following vessels were also hauled out on the slip-way in the course of season 1908:—tug *Montcalm*, tug *Hosanna*, scow *No. 9*, tug *Alpha*, scow *No. 14*, tug *Ottawa*, tug *Reserve*, tug *Champlain*, tug *Emilia*, scow of St. Ours lock, tug *Frontenac*, tug *Vercheres*, scow *No. 10*, barge *Acetylene*, for repairs either to their propellers, rudders, shafting or hulls.

The stone lifter of the Public Works Department was brought to the shipyard and received a final coat of paint. The piping was overhauled, and two cleats added to the deck equipment.

N.B.—This is outside of the ordinary work of the Marine and Fisheries, but the facilities at the shipyard and central location of Sorel, make it convenient for other departments to have some of their work done here.

MAINTENANCE AND IMPROVEMENTS TO SHIPYARD BUILDINGS AND PLANT.

The buildings of the different shops were kept in repair. The machine shop foundation had to be examined, and as a consequence, the ground plates and bases of studding were renewed; some additional ventilation was provided, the confined spaces underneath being apt to induce rotting of the timbers.

At the blacksmith shop a crane of 15 feet radius, and 1,500 lbs. capacity was added to the plant.

At the boiler shop, some broken sections of the iron floor were renewed. The furnace was relined with fire brick. A set of powerful bending rolls were purchased and received during the winter. These will be capable of bending boiler plates 1¼-inch thick and roll boiler halves 14 feet diameter and 12 feet 6 inches wide.

Building Nos. 2 and 3 had ordinary repairs and painting.

Building No. 4.—Contains offices and stores. Alterations were made to increase space available for offices; in summer 1908, the foundation was repaired; the bottom stringer being rotten, had to be renewed.

Building No. 5, Machine shop.—Repairs were made to soil plate, as the woodwork was decaying.

Buildings Nos. 6, 7, 8, 9, 10 11, 12, 13, 14, 15, 17, 18 and 19 were all painted during the summer of 1908.

Shipyard railway.—The narrow gauge track received new extensions, one line being built from the saw-mill to the boiler house, No. 2, to carry the slabs from the mill to the fire. One line of track was also laid alongside of the standard gauge railway siding and extended to the wharf No. 4. These two new lines were connected with the previously existing lines, and also with the new dry kiln, and the shed for dry lumber.

Six new switches, two right angle crossings and about 2,000 feet of new track were laid. Planking was renewed and crossings added on the old track, wherever necessary.

Wharf No. 4.—Which is the newest and largest of the four at the shipyard, was filled at the rear, with material dredged at high water, by *Dredge No. 7*, and discharged through its floating pipe.

The anchorage of the cribwork was added to by driving groups of piles and binding same with chains and rods to the loaded platform of the wharf. The earth filling was levelled, and a wooden floor laid on top. The first cargo of coal was placed there in November, 1908.

NEW BUILDINGS.

Four new buildings were erected in the course of the year in order to meet the growing requirements. One known as No. 22 is a store house for castings large and small; there are two floors 50 by 32 feet.

In connection with this store-room, there is a plank platform 100 feet by 36 feet, where heavy castings are stored, while waiting to be brought to the machine shop near by. The whole is inclosed by a wire fence 100 by 80 feet, with gates under lock and key, so as to ensure correct distribution of all castings issued to the several constructions.

Another new building is No. 23. The dry kiln, which existed before, had become unequal to the needs of the shipyard. A new one was built in 1908. There are two compartments, 10 feet by 60 feet, with 1,600 feet in each, of 1¾-inch piping. The kiln is capable of taking alternately or at same time 18,000 feet of lumber. It is equipped with necessary ventilators and means of regulating the heat and evaporation.

Building No. 20 is a double pitched roof building 51 feet long by 25 feet, with wide sliding doors on either side, and serves for storing lumber after it has been dried in the kiln, or dressed at the mill, and is wanted as a reserve. The narrow gauge track runs along the doors on the south side.

Building No. 21, or boiler-room No. 2, also erected in 1908, is a sort of temporary housing for two boilers of the locomotive type. These are used to consume the slabs

and sawdust; the steam generated serving to heat the dry kiln, and also for the heating, in winter time, of the sawmill, paint shop, asbestos shop and mould loft.

The boilers rest on a concrete foundation which has been made permanent from the first and will allow the superstructure, now of rough boards only, to be lined with brick or concrete, at some future time.

This boiler-room No. 2 is connected with the sawmill by a square wooden box, carried on posts, through which the sawdust and shavings are blown into a large bin in the boiler-room. It is also connected by steam pipes with asbestos shop and adjoining buildings.

The northern end of the grounds is gradually being occupied by new buildings. As a consequence the extension of the narrow gauge track, mentioned above, and also the increasing of the fire protection were necessary.

WATER WORKS.

One main line 6 inches in diameter, running along the railway track and branching out with 4 inch pipes to wharf No. 4 and to wharf No. 3, with one hydrant on each branch, were laid. One hydrant was placed northwest of boiler-room No. 2, and a fourth one at a short distance from buildings No. 15 and 19, where the patterns are stored, as well as the movable equipment of vessels in winter time. Seven hundred feet of pipe were laid and four hydrants, as mentioned above, and two others repaired.

DRAIN.

An earthenware drain pipe was laid from the centre of the space between the mould loft and dry kiln and lumber store to the water's edge, at wharf No. 4. The area between the above mentioned buildings has since been quite free of water, even during the spring thaw and heavy rains.

WINTER WORK, 1908-9.

At the end of the season of 1908, the whole of the dredging fleet enumerated above, together with the new constructions launched during the summer, were at the shipyard as their winter quarters.

In addition to this, were the following: *La Canadienne,* the *Lady Grey,* the *Maisonneuve,* the *International,* of the Public Works Department; as well as the vessels of the construction of lights branch: *Vercheres, Hosanna, Alpha,* and several scows. The *Shamrock* and *Acetylene* also had their repair work done at the yard; and finally the *Constance* was brought here in the fall, to have a new boiler installed.

Following in alphabetical order, are the principal items of repairs executed in the course of the winter:—

Acetylene.—This vessel of the maintenance of lights branch, met with an accident at the close of navigation of 1908, while lifting buoys. The vessel had a load of gas buoys on board and was being towed to Sorel, when she capsized and turned turtle.

The wrecked vessel was towed in that position to Sorel harbour, and an attempt to right her was made by means of the crane of dredge *International,* but was not successful. As the ice was fast forming, and vessels had to go into winter quarters, the operations were postponed until the ice was strong enough to serve as base. Finally on December 29, the vessel was turned right side up and afterwards removed from its position in the channel, a road having to be cut through ice almost two feet thick. The vessel was found to have lost her boiler, and all movable things on deck. The crane was broken by dragging on the bottom, and many connections burst through freezing. The woodwork was out of plumb and partly broken.

The *Acetylene* received a general overhauling, all machinery being dismounted and refitted. A new boiler was installed, new piping laid; the crane was repaired; the

woodwork was altered so as to include the compressors in the main room of the barge; the roof was repaired, windows and doors touched up or renewed; the sides and hull of the vessel were painted.

Alpha.—Changes to steering apparatus, caulking deck and painting.

Coal barges No. 1, 2, 3 and 4 were caulked and painted. *No. 3* was given a new life boat.

Bronx, a gasoline launch, hauled out for repairs.

Building No. 16, or power house, received coat of paint, during week following Christmas.

Building No. 17, saw-mill.—A circular saw was added, also a saw setting machine.

Tug *Champlain* was hauled out in November and wintered on the ways.

The position of the shaft was straightened and some repairs were made to the boiler. The vessel was scraped and painted and let down in the spring.

Tug Carmelia had a new smokestack.

Tug Cartier.—The boiler had to be raised for inspection, and was found to need repairs to lower front part and water pan. New plates had to be flanged, the old ones renewed, and of course, connections overhauled, asbestos relaid, &c.

C.G.S. Constance.—Had a new boiler built at the yard and installed. This necessitated cutting through deck, and through roof of boiler room. A wheel house was added to the vessel. The machinery and equipment received at the same time a thorough overhauling.

CONSTRUCTION OF LIGHTS.

Vessel Vercheres.—In order to secure a clear view from pilot house astern, two ventilators were shifted to each side. A new life boat was supplied to the *Vercheres.*

Pile Driver Scow was caulked and painted during winter 1909.

Barge Davis—Had a new boom, repairs to mast, painting and caulking part of deck.

De Levis.—The boiler had to be raised for inspection and needed new plates at lower front and new water pan. The repairs were of the same nature as those on the *Cartier.*

Dredge No. 3 was hauled out in November. The hull was thoroughly scraped and painted in the fall; an additional coat was given after the winter. The vessel was launched only in the spring of 1909.

Dredge No. 7.—There were new water ends fitted on two feed pumps. Repairs to the breasting winches, new cast-iron nipple on the suction pipe of dredge, 3 feet long x 3 feet square.

Jet blowers were installed on boiler, making two boilers so equipped. The pipe pontoons were hauled out and repaired, scraped and painted. The winch scow was hauled out for repairs. The special pontoon connected at the angle of dredge was repaired pending the construction of a new one.

Dredge No. 8 had ordinary repairs and painting.

Dredge No. 9 also had ordinary repairs; a new pair of davits was installed and another repaired. There were also repairs to the crane of the suction pipe; a new gear for the stern winch and strengthening of deck forward.

Tug *Emilia* had repairs to her deck, guards and stanchions.

Tug *Frontenac* had ordinary repairs; was supplied with a new flat-bottomed boat 15 feet x 3 feet. The hull was painted and the gasoline launch was equipped with a new Bellfuss engine.

Hosanna.—Main deck was caulked, spring of 1909, besides painting.

Iberville.—The boiler had to be lifted from its place and repairs to bottom angle and water pan were made. To make the above repairs the woodwork had to be cut and connections, asbestos covering, &c., made anew after boiler was reinstalled.

International (a spoon dredge of the Public Works Department) wintered here. The three spuds and dipper arm were taken down for repairs.

The spuds were refitted and put in position by means of the shear legs. A new spider for bucket crane was forged and fitted. Foundations of one engine were rebuilt of steel instead of wood, and two dumping scows were repaired.

James Howden.—Boiler had to be lifted for examination and repairs; the front bottom plates had to be renewed. In order to repair the boiler and re-insert the tubes the cylinder engine had to be taken out. As in the case of the other two boilers before mentioned, connections and covering had to be overhauled.

Jessie Hume had a steam steering gear installed; this was taken from the *DeLevis,* where a stronger machine was placed last year in view of work below Quebec.

Lady Grey wintered at the yard. There were ordinary repairs; some ventilators added. A 24′ x 6′ x 26″ Clinker built boat was built for her.

The tank was cleaned and painted; the double bottom spaces were cleaned and received a cement wash.

Lake St. Pierre.—The boiler had to be raised for inspection. It was necessary to repair the lower front and water pan. This is the fourth of the series of boilers which had to be repaired in the same manner. There is considerable labour in repair of this kind, the old plates having to be cut in place, the new ones adjusted and tried, and then drilled and riveted, all in the cramped space in the hold of the tugs.

Maintenance of Lights.—Repairs were made to 3 floating lightships of Lake St. Peter channel, 1, 2 and 3. The *No. 2* had a new deck, new guards, stanchions, windlass; the other two had minor repairs of the same nature; decks were caulked, woodwork painted.

A mast to carry a light was built and shipped to wharf, Longueuil ferry, near Bellerive Park, Montreal.

Boiler makers, smiths and painters were supplied for repairs to gas buoys.

Maisonneuve wintered at the yard; was hauled on slipway, the boiler was reconstructed; a new rudder made, woodwork repaired and painted, deck was caulked.

Montcalm had repairs to her boiler, which had to be raised in the same manner as described for the *Lac St. Pierre* and *Iberville.*

Shamrock had six new stay tubes fitted ; some alterations to woodwork of chart-room, and some repairs to main hoisting winch.

Sounding Scow wintered at shipyard, was hauled out on the slipway, repaired, caulked and painted.

A number of pressing jobs accomplished throughout the year for vessels of the dredging fleet, or auxiliaries, are not detailed in the foregoing report, but form together a considerable total.

The readiness of the shipyard to handle these emergency jobs on short notice, with trained mechanics, is of vital importance to the efficiency of the channel dredging fleet.

General.—All the buildings of the shipyard were painted during the year 1908. The machinery was kept in good order, as well as the water-works system for fire protection. In winter, the roads were maintained, ice was cut around the vessels, and special watch kept over the fleet wintering here. The telephone exchange and electric light lines were kept in constant working order. The compressed air distribution and air compressor were also kept in constant efficiency.

Force Employed.—The force employed varied from 623 to 920 and averaged 729 for the twelve months.

The financial statement herewith, shows the total amount expended at the Sorel shipyard during the fiscal year ending March 31, 1909, t ohave been $1,132,279.40.

I have the honour to be, sir,
Your obedient servant,

L. G. PAPINEAU.
Assistant Director of Shipyard.

STATEMENT of Revenue and Expenditure for the Fiscal Year 1908–1909.

Year.		Amount.	Year.		Amount.
1909.		$ cts.	1909.		$ cts.
March 31..	To Appropriation for St. Lawrence ship channel actually expended	730,728 10	March 31..	By Operating dredging fleet $537,638 79	
" 31..	Appropriation for improvements to dredging plant		" 31..	Construction for dredging fleet 47,691 03	
	Construction of dredge for Cap à la Roche. $73,673 04		" 31..	Improvements to Sorel shipyard 42,758 72	
	" Stone lifter No. 4 10,797 93		" 31..	Stores and materials 79,234 04	
	" 10 cub. yard dipper dredge 40,708 70				707,322 58
	" Elevator dredge 75 54		" 31..	Improvements to dredging plant.	
	" Twin screw wooden tug 5,970 10		" 31..	Construction No. 19 dredge for Cap à la Roche 73,673 04	
		131,225 31		" No. 20 stone lifter No. 4 10,797 93	
" 31..	Steamer for construction of lights below Quebec	156,134 71		" No. 24, 10 cub. yard dipper dredge 40,708 70	
" 31..	" " " on lakes	52,308 43		" No. 26 elevator dredge 75 54	
" 31..	Steamer *Maisonneuve*	4,047 57		" No. 29 twin screw wooden tug 5,970 10	
" 31..	Hydrographic Survey	4,166 00			131,225 31
" 31..	Construction of lights, P.Q.	16,502 56	" 31..	" No. 21 steamer for construction of lights below Quebec	156,751 91
" 31..	Maintenance of lights, P.Q.	16,953 22	" 31..	" No. 22 steamer for construction of lights on lakes	52,308 43
" 31..	" " B.C.	908 62	" 31..	Steamer *Maisonneuve*, repairs &c $ 2,488 03	
" 31..	Steamer *Scout*	1 43	" 31..	" " construction of scow 1,578 54	
" 31..	Signal service	1,516 69			4,066 57
" 31..	Steamer *Druid*	41 51	" 31..	Hydrographic survey, steamer *La Canadienne*	4,256 00
" 31..	" *Eureka*	34 00	" 31..	Construction of lights, P.Q.	22,587 56
" 31..	Department of Public Works	3,014 03	" 31..	Maintenance of lights, P.Q.	16,953 22
" 31..	Steamer *Champlain*	283 96	" 31..	" " B.C.	908 62
" 31..	Quebec agency	24 64	" 31..	Steamer *Scout*	1 43
" 31..	Steamer *Reserve*	158 31	" 31..	Signal service	1,516 69
" 31..	" *Montcalm*	13 74	" 31..	Steamer *Druid*	41 51
" 31..	Department of Railways & Canals	119 19	" 31..	" *Lady Grey*, trip to Seven Islands	5,379 45
" 31..	Salaries at Ottawa	2,463 42	" 31..	" *Eureka*	34 00
" 31..	Cruiser *Constance*	10,322 51	" 31..	Department of Public Works, repairs, &c	5,743 91
" 31..	Sundry refunds	1,371 45	" 31..	Steamer *Champlain*	283 96
			" 31..	Quebec agency	24 64
			" 31..	Steamer *Reserve*	158 31

			" 31..	" *Montcalm*		13 74
			" 31..	Department of Railways & Canals		119 19
			" 31..	Salaries at Ottawa		12,259 86
			" 31..	Cruiser *Constance*, repairs and supplies	$ 3,913 80	
			" 31..	" " boiler construction	6,408 71	
						10,322 51
		1,132,279 40				1,132,279 40

Shipyard, Sorel, March 31st, 1909.

L. G. PAPINEAU,
Assistant Director of Shipyard.

APPENDIX No. 5.

STATEMENT of Expenditure for the Year 1908-9.

Service.	Vote.	Expenditure.	Totals.
	$ cts.	$ cts.	$ cts.
Ocean and river service—			
Dominion steamers and icebreakers	635,000 00	634,919 76	
Examination of masters and mates	12,600 00	8,244 56	
Rewards for saving life	39,600 00	35,586 13	
Investigation into wrecks	12,000 00	8,569 02	
Schools of navigation	10,000 00	3,599 23	
Registration of shipping	2,000 00	1,471 92	
Removal of obstructions	20,000 00	2,450 27	
Tidal service	32,000 00	31,271 67	
Winter mail service	16,000 00	6,509 97	
Cattle inspection	3,600 00	3,555 99	
Wrecking plants	30,000 00	30,000 00	
Unforeseen expenses	5,000 00	4,166 78	
Naval Militia	10,000 00	8,652 33	
Patrolling waters in northern portion of Canada and Hudson bay	56,000 00	55,733 94	
New icebreaking steamer	365,000 00	363,073 19	
New steamer to replace *Lansdowne*	75,000 00	.....	
To recoup P. E. Island Government *re* transportation of hay	4,000 00	4,000 00	
			1,201,804 76
Public Works—chargeable to capital—			
Ship channel	760,000 00	730,728 10	
Permanent piers in Lake St. Peter, &c	100,000 00	94,185 84	
Dredging plant, River St. Lawrence	213,000 00	131,370 64	
Purchase of yard property at Sorel	30,000 00	.....	
Compensation to Wm. Paul, jr	7,000 00	7,000 00	
Gratuity to the mother of the late J. Carbonneau	500 00	500 00	
			963,784 58
Lighthouse and coast service—			
Agencies, rents and contingencies	33,000 00	31,403 17	
Salaries and allowances to lightkeepers	330,000 00	321,218 91	
Maintenance and repairs to lighthouses	730,000 00	725,013 05	
Repairs to lightships	20,000 00	16,606 14	
Construction of lighthouses and aids to navigation " apparatus	1,300,000 00	1,223,713 29	
Wireless stations	131,550 00	66,238 07	
Signal service	9,000 00	8,939 35	
Administration of pilotage	31,550 00	31,546 00	
Pensions to retired pilots	3,600 00	3,400 00	
Maintenance and repairs to wharfs	3,000 00	2,338 47	
Maintenance and upkeep of dockyards	50,000 00	45,061 98	
Breaking ice in Thunder bay and Lake Superior	40,000 00	33,692 00	
Salaries of temporary clerks, &c	17,000 00	7,720 09	
Telephone stations	10,000 00	.....	
Telephonic reporting stations (signal service) Montreal and Father Point	23,500 00	20,273 60	
New steamer for the great lakes and Georgian Bay	150,000 00	147,186 94	
Repairs to maritime road, Gaspé	2,000 00	1,696 59	
Charter of steamers, Lime Kiln Crossing	12,000 00	11,650 00	
Improvements at Parry Sound	30,750 00	23,978 93	
Purchase of land at St. John, N.B	50,000 00	.....	
Pension to Pilot F. X. Lamarre	150 00	125 00	
New lightship at Point Pelee, Lake Erie	30,000 00	.....	
Signal service for Grosse Ile	1,000 00	.....	
			2,721,801 58
Scientific Institutions and hydrographic surveys—			
Meteorological service	122,300 00	120,664 59	
Magnetic observatory	3,200 00	3,052 47	
Montreal "	500 00	500 00	
Kingston "	500 00	500 00	
Hydrographic surveys	170,600 00	130,229 83	
" survey steamer for Pacific coast	45,750 00	41,104 45	
" " " for Gulf of St. Lawrence	50,000 00	527 96	
			296,579 30
Carried forward	.....	.....	5,183,970 22

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STATEMENT of Expenditure for the Year 1908-9—*Concluded.*

Service.	Vote.	Expenditure.	Totals.
	$ cts.	$ cts.	$ cts.
Brought forward			5,183,970 22
Scientific Institutions and hydrographic surveys—			
Marine hospitals	55,000 00	54,989 85	
Shipwrecked and distressed seamen	3,000 00	2,004 02	
			56,993 87
Steamboat inspection	46,600 00	41,226 47	
Inspection of Dominion Steamers and fog alarms	4,500 00		41,226 47
Fisheries—			
Salaries and disbursements of Fishery officers	192,900 00	161,756 34	
Fish breeding	322,300 00	190,563 19	
Fisheries protection service	270,500 00	242,601 14	
Oyster culture	7,000 00	3,635 36	
Cold storage	60,000 00	32,688 58	
Dog-fish reduction works	75,000 00	45,223 88	
Souris fish curing establishments	12,000 00	2,324 78	
Canadian Fisheries exhibits	16,000 00	4,300 01	
Distributing fishing bounty	5,600 00	5,598 09	
Building fishways	10,000 00	6,764 22	
Legal and incidental expenses	2,000 00	1,970 51	
Georgian Bay laboratory	1,500 00	1,500 00	
Fisheries protection service cruiser for Pacific coast	225,000 00	8,354 21	
Marine biological stations	20,000 00	20,099 70	
Transportation of fresh fish	25,000 00	4,232 00	
Fishery commissions	15,000 00	7,337 73	
New steamer to replace *Osprey*	25,000 00	25,000 00	
" " *Georgia*	20,000 00	18,000 00	
Gasoline launches for British Columbia	4,000 00	3,998 85	
Inquiries into fisheries rights (Federal & Prov'l. Gov'ts)	10,000 00	748 12	
Services of customs officers issuing licenses to U. S. F. vessels	700 00	486 60	
International Fisheries commissions	5,400 00	4,545 38	
			791,728 69
Miscellaneous—			
To repay A. Cushing & Co., *re* seizure of schr. *Evolution* in 1893	800 00	800 00	800 00
Investigation, Marine and Fisheries Department	55,000 00	31,316 90	31,316 90
Returns to Parliament	500 00	681 02	681 02
Contingencies	21,150 00	20,320 92	20,320 92
Civil government salaries	122,250 00	163,222 36	163,222 36
Totals			6,290,260 45

APPENDIX No. 6

STATEMENT of Revenue of Marine and Fisheries Department for Fiscal Year Ended March 31, 1909.

Service.	Amount.	Refunds.	Total.
	$ cts.	$ cts.	$ cts.
Harbours, piers and wharfs	18,288 25	484 00	17,804 25
Dominion steamers—			
Champlain.			
Freight, 1,127.86; passengers, 5,699.85; meals, 275.75; berths	7,103 46		
Minto.			
Freight, 6,171.99; passengers, 3,275.50; meals, 277.10; berths, 487.00; miscellaneous, 332.25	10,543 84	13 52	
Stanley.			
Freight, 6,443.97; passengers, 2,887.00; meals, 334.10; berths, 589.00; extra, 1.00	10,255 07		27,888 85
Winter mail service	123 30		123 30
Examination, masters and mates	4,192 50		4,192 50
Fines and forfeitures	418 00		418 00
Steamboat inspection fund	5,952 96		5,952 96
" engineers certificates	2,014 50		2,014 50
Sick mariners fund	67,483 46	1,234 13	66,249 33
Signal station dues	663 00		663 00
Decayed pilots fund	5,485 88		5,485 88
Pilots expense account	140 00		140 00
Marine register fees	44 42		44 42
Pilots licenses	35 00		35 00
Casual revenue marine	35,584 37	575 46	
" fisheries	3,481 48		38,490 39
Total	171,809 49	2,307 11	169,502 38
Fisheries revenue	75,011 31	2,109 75	72,901 56
Modus Vivendi	9,794 70		9,794 70

Fisheries Revenue for Fiscal Year Ended March 31, 1909.

Ontario Sales and Fines	$ 760 78	
Quebec Licenses and Fines	6,787 91	
Nova Scotia	5,394 70	
New Brunswick	12,385 89	
Prince Edward Island	2,393 66	
Manitoba	3,237 22	
Saskatchewan	1,185 50	
Alberta	1,296 00	
Hudson Bay	20 00	
British Columbia	41,321 65	
Yukon	228 00	
	$75,011 31	$75,011 31
Less Refunds :—		
Nova Scotia	25 00	
New Brunswick	75	
Manitoba	14 00	
British Columbia	2,070 00	
	$2,109 75	$2,109 75
		$72,901 56
Modus Vivendi		9,794 00
Grand total		$82,695 56

For the Year Ended March 31, 1909, Minor Public Works—Revenue—Wharfs, Piers and Harbours.

Locality.	Wharfinger.	Date of Appointment.	Remuneration Allowed.	Amount.
Ontario.			p.c.	$ cts.
Blind River	W. H. McGauley	April 14, 1908.	50	646 42
Bronte	J. J. Wilson	Oct. 26, 1905.	25	58 77
Bruce Mines	W. Fleming	April 15, 1902.	25	145 41
Echo Bay	T. W. Trotter	Oct. 9, 1908.	25	49 79
Goderich	W. Marlton	Feb. 14, 1894.	25	58 60
Haileybury	R. B. Jessup	May 8,	25	324 30
Hilton	E. Stubbs	June 20, 1894	50	182 51
Honora	D. Hay	Oct. 26, 1905.	25	13 87
Kingsville	W. H. Black	Aug. 1, 1902.	25	66 20
L'Orignal	E. A. Hall	May 23, 1904.	25	202 66
Leamington	J. E. Johnson	May 23, 1906.	25	119 27
Midland	J. Yates	Oct. 26, 1905.	25	462 63
North Bay	P. Kinsella	June 30, 1905.	25	8 60
Oshawa	W. T. Henry	Aug. 10, 1904.	25	1 42
Pelee Island	H. Henderson	Feb. 2, 1907.	25	167 59
Pembroke	T. Anderson	April 27, 1906.	50	100 00
Providence Bay	J. McKechnie	June 29, 1908.	50	16 50
Richards Landing	R. Armstrong	June 10, 1907.	50	171 64
Rondeau	W. R. Fellows	Dec. 17, 1883.	25	33 30
Rosseau	A. Monteith	Aug. 6, 1908.	50	147 49
Sault Ste. Marie	G. S. Boyd	April 9, 1897.	$100 per month during navigation season	668 89
Sheguiandah	F. G. R. Bradbury	Aug. 16, 1906.	25	106 19
Southampton	Geo. McVittie	Aug. 16, 1895.	25	147 73
South Lancaster	J. D. Perron	May 6, 1907.	25	121 41
Thessalon	D. J. Saudie	April 22, 1902.	50	170 77
Wiarton	W. Gilbert	Nov. 13, 1907.	25	184 20
				4,376 16
Harbour dues —				
Fort William			$84 75	
Port Arthur			35 00	
				119 75
Total				4,495 91

For the Year Ended March 31, 1909, Minor Public Works—Revenue—Wharfs, Piers and Harbours.

Locality.	Wharfinger.	Date of Appointment.	Remuneration Allowed.	Amount.
Quebec.			p.c.	$ cts.
Anse aux Gascons	S. Chapados	Feb. 16, 1906..	25	89 27
Anse St. Jean	L. Lavoie	May 13, 1905..	$19 per annum.	46 54
Baie St. Paul	E. Cunningham	Oct. 26, 1905..	25	36 90
Beauport	Under lease			20 00
Berthier	J. Blais	Nov. 7, 1905..	50	87 53
Cap à l'Aigle	A. Dufour	May 11, 1906..	25	22 00
Carleton	B. Leclerc	June 13, 1905..	50	1 82
Chicoutimi	T. Tremblay	May 23, 1901.	$122 per annum.	200 00
Coteau Landing	E. de Chantal	Feb. 1, 1909..	25	22 51
Grand River	Geo. Beaudin	Nov. 16, 1896..	25	199 93
Hudson	E. W. Mullan	July 13, 1904..	50	47 83
Ile aux Grues	D. Vézina	June 13, 1904..	25	23
Lacolle	R. J. Robinson	Mar. 8, 1894..	25	13 37
Les Eboulements	W. Bouchard	May 7, 1906..	$29 per annum.	33 00
Longueuil	Eusèbe Denicourt	May 15, 1901 .	25	127 41
Magog	D. Peters	June 15, 1906 .	50	49 27
Matane	Louis Durette	Aug. 25, 1900..	25	206 24
Murray Bay	J. Gagnon	May 16, 1906.	$40 per annum.	59 85
New Carlisle	J. Chisholm	April 22, 1902..	50	62 22
Paspébiac	Julien de Caen	Feb. 22, 1908.	50	12 61
Peel Head Bay	S. N. Ray		25	6 53
Percé	E. Bourget	Mar. 11, 1903..	25	233 20
Port Daniel	F. X. Gagnon	Feb. 26, 1907 ..	$50 per annum.	56 74
Rigaud	O. Mallette	Oct. 14, 1907..	50	33 69
Rimouski	A. Lavoie	Mar. 27, 1905..	50	118 55
Rivière du Loup	L. J. Puize	Nov. 7, 1905..	$146 per annum.	192 39
St. Anicet	S. Dupuis	Sept. 14, 1896..	25	11 00
Ste. Anne de Bellevue	M. C. Bezner	May 21, 1908..	50	180 08
St. Alphonse de Bagotville	Thos. Fortier	April 20, 1909..	$48 per annum.	63 35
St. Jean d'Orléans	L. Lachance	Sept. 26, 1896..	50	15 08
St. Jean Port Joli	J. Ouellette	Nov. 5, 1908..	25	19 26
Ste. Cécile du Bic	O. Ouellette	Aug. 24, 1900.	25	94 42
St. Laurent d'Orléans	J. Godbout	May 11, 1904..	50	20 15
St. Nicholas	Under lease			25 00
St. Siméon	H. Savard	May 7, 1908..	25	1 46
St. Thomas de Montmagny	L. L. Dionne	Oct. 22, 1896..	25	75
St. Zotique	A. Bissonnette	May 7, 1906..	25	9 48
Tadousac	A. Gingras	May 29, 1906..	$30 per annum.	57 20
				2,477 26
Refunds				484 00
Harbour Dues—				
St. John's			$118 00	
Sorel			163 00	
				281 00
				3,242 26

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For the Year Ended March 31, 1909, Minor Public Works—Revenue—Wharfs, Piers and Harbours.

Locality.	Wharfinger.	Date of Appointment.	Remuneration Allowed.	Amount.
Nova Scotia.			p. c.	$ cts.
Babin's Cove	Alex. Thomas	Oct. 20, 1897	25	31 09
Barrington	J. H. Christie	Aug. 31, 1896	25	198 74
Battery Point	J. W. Ellis	Nov. 26, 1907	25	0 62
Bayfield	R. Grant	April 23, 1902	25	24 27
Bear Point	J. Small	May 23, 1896	25	0 43
Belliveau Cove	St. C. Thériault	Nov. 24, 1892	25	126 43
Black Point	J. P. Littlewood	Jan. 8, 1894	25	21 75
Brooklyn	Jas. McLeod	Aug. 3, 1904	25	41 29
Brulé	Alex. Craig	Dec. 26, 1898	25	3 35
Canada Creek	H. Dickey	Aug. 12, 1899	25	3 03
Centerville	Alf. Ward	May 28, 1897	25	87 58
Church Point	L. Belliveau	March 20, 1907	25	62 41
Delaps Cove	R. W. McCaul	Nov. 28, 1889	25	8 52
Descousse	L. N. Poirier	May 31, 1906	25	36 49
Digby	W. W. Haden	April 20, 1897	25	2,586 88
Freeport	T. W. Brooks	Nov. 26, 1907	25	51 05
Grandville Centre	H. Roney	July 6, 1903	25	67 05
Hall's Harbour	T. A. Neuville	Jan. 8, 1897	25	68 31
Halifax	C. H. Harvey	Agent of Dept	..	100 00
Hampton	C. E. Dunn	Dec. 22, 1906	25	18 35
Harbourville	L. D. Curry	" 29, 1906	25	36 57
Horton's Landing	F. G. Curry	April 30, 1898	25	8 87
Jordan Bay	J. Fredericks	Feb. 20, 1900	25	17 77
Kelly's Cove	J. B. Huskins	April 11, 1899	25	0 30
Margaretsville	D. H. McLean	July 10, 1907	25	101 62
Meteghan Cove	H. F. Robichaud	May 28, 1897	25	57 46
Meteghan River	D. D'Entremont	" 14, 1897	25	23 39
Morden	J. Redgate	Nov. 16, 1893	25	6 69
Oak Point, Kingsport	Under lease		..	200 00
Ogilvie	J. L. Swindle	March 4, 1907	25	19 27
Parker's Cove	S. Anderson	July 12, 1903	25	40 23
Pickett's Wharf	F. A. Eaton	Aug. 2, 1899	25	75 45
Plympton	W. K. Smith	" 8, 1890	25	14 90
Port Dufferin	A. Balcon	Feb. 17, 1899	25	16 96
Port George	O. Douglas	June 26, 1900	25	54 65
Port Hawkesbury	F. McInnis	March 20, 1907	25	377 13
Port LaTour	C. D. Cook	Aug. 20, 1904	25	23 22
Port Lorne	F. Beardsley	June 22, 1897	25	42 24
Port Mouton	Geo. Cook	Oct. 28, 1905	25	7 32
Port Morien	D. F. Macualey	Nov. 6, 1906	7½	461 09
Port Wade	J. D. Apt	Sept. 12, 1907	25	43 02
Sandford	Alex. Shaw	May 26, 1903	25	8 85
Saulnierville	Jn. T. Saulnier	Aug. 25, 1888	25	9 29
Shag Harbour	R. Nickerson	Oct. 26, 1905	25	4 07
Swims Point	J. F. Duncan	Jan. 23, 1902	25	17 90
Victoria	A. West	Dec. 4, 1900	25	5 38
West Pubnico	C. C. D'Entremont	March 28, 1898	25	23 22
Wolfeville	J. L. Franklin	Oct. 22, 1901	25	30 97
Whycocomagh	D. Livingstone	Dec. 22, 1906	25	83 03
Harbour Dues—				
Bridgewater, N.S.			39 00	
International Pier, N.S.			121 50	
				160 50
Grand total				5,519 00

FOR the Year Ended March 31, 1909, Minor Public Works—Revenue—Wharfs, Piers and Harbours.

Locality.	Wharfinger.	Date of Appointment.	Remuneration Allowed.	Amount.
New Brunswick.			p. c.	$ cts.
Anderson's Hollow	W. C. Anderson	Feb. 13, 1899	25	108 13
Campbellton	Geo. E. Asker	May 11, 1904	25	1,970 01
Caraquet	Henri Friolet	Sept. 11, 1906	25	30 21
Cape Tormentine	N. B. Riley	June 25, 1905	25	599 08
Dalhousie	W. J. Smith	June 27 1891	25	264 67
Hopewell Cape	Geo. D. Wilson	April 10, 1899	25	51 59
Tracadie	Prosper Savoy	Sept. 23, 1889	25	51 13
Two Rivers	W. Wilbur	Jan. 8, 1894	25	1 84
				3,082 66
Prince Edward Island.				
Annandale	W. C. Jenkins	May 4, 1897	25	82 53
Bay View	J. Harrington	Oct. 2, 1885	25	1 61
Belfast	Jas. F. Halliday	May 1, 1901	25	62 03
Chapel Point	R. McCormack	Sept. 18, 1885	25	17 88
China Point	W. S. N. Crane	Sept. 18, 1885	25	39 47
Charlottetown	A. Lord	Agt. of Dept.	..	730 32
Clifton	Jn. Gunn	May 24, 1900	25	26 25
Crapaud and Victoria	E. McKinnon	July 7, 1897	25	220 16
Georgetown	R. R. Jenkins	Oct. 14, 1892	25	10 23
Haggerty's Wharf	C. Fisher	March 27, 1908	25	32 71
Hickey's	M. Webster	Oct. 22, 1896	25	43 65
Higgin's Shore	J. J. Henry	Nov. 9, 1891	25	1 77
Hurd's Point	T. Montgomery	Aug. 16, 1901	25	63 78
Kier's Shore	W. Hodgson	June 10, 1895	25	136 42
Lambert and Stevens	W. Johnston	May 3, 1900	25	7 50
Murray Harbour, North	J. McKinnon	Jan. 27. 1896	25	4 99
Murray Harbour, South	John Bull		25	3 00
North Cardigan	R. J. Steele	May 1, 1901	25	63 68
Pownal	M. M. Haley	Oct. 13, 1896	25	31 33
Red Point	A. Smith	April 3, 1900	25	16 73
Sturgeon Pier	N. Randall	Dec. 31. 1908	25	32 22
Tignish	A. G. Gaudet	Aug. 23, 1898	25	28 74
Vernon River	W. M. Forbes	April 22, 1902	25	48 65
Wood Island	Jas. Young	April 10, 1899	25	5 27
				1,710 92

FOR the Year Ended March 31, 1909, Minor Public Works—Revenue—Wharfs, Piers and Harbours.

Locality.	Amount.
British Columbia.	$ cts.
Comox (Harbour dues)	139 00
Ladysmith (Harbour dues)	1 00
Nanaimo " "	97 50
Total	237 50

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LIST of United States Fishing Vessels to which Licenses were issued under the Act, intituled, "An Act respecting Fishing Vessels of the United States of America," during the fiscal year ended March 31, 1909.

Vessel.	Port of Registry.	Tonnage.	Port of Issue.	Amount.
				$ cts.
Viola	Beverly, Me	14	Yarmouth, N. S	21 00
Maxime Elliot	Gloucester, Mass	75	Shelburne, N. S	112 50
Quickstep	Boston, Mass	75	Digby, N. S	112 50
Marjorie Turner	Portland, Me	44	Yarmouth, N. S	66 00
Elector	Gloucester, Mass	84	Pubnico, N. S	126 00
Indigin	"	89	Shelburne, N. S	133 50
Dickerson	Southwest	23	Yarmouth, N. S	34 50
Ella M. Goodwin	Gloucester, Mass	86	Sand Point, N. S,	129 00
J. W. Parker	Boston, Mass	96	"	144 00
Susan & Mary	"	83	Halifax, N. S	124 50
Tattler	Gloucester, Mass	125	Lockeport, N. S	202 50
Lizzie Maud	Vinal Haven	48	Yarmouth, N. S	72 00
Senator	Gloucester, Mass	74	Pt. Mulgrave	111 00
Margaret	"	79	Canso, N. S	118 50
Yakima	"	71	"	106 50
Cavalier	"	96	Port Hawkesbury, N.S.	144 00
Richard	"	90	"	135 00
A. R. Lawson	"	85	Lockeport, N. S	127 50
Georgiana	Boston, Mass	87	Pubnico, N. S	130 50
Harvard	Gloucester, Mass	76	Liverpool, N. S	114 00
Waldo L. Stream	"	81	Port Hawkesbury, N.S.	121 50
Arbutus	"	86	Liverpool, N. S	122 00
Selma	Boston, Mass	87	Port Hawkesbury, N.S.	130 50
Vera	Gloucester, Mass	77	"	115 50
Dictator	"	92	Canso, N. S	138 00
Cath. Burke	Boston, Mass	92	"	138 00
Mystery	Plymouth, Me	78	"	117 00
Gossip	Gloucester, Mass	91	"	136 50
John Hays Hammond	"	92	Port Hawkesbury, N.S.	138 00
Tacoma	"	71	House Harbour, P. Q.	106 62
Arcadia	"	90	"	135 21
Moornam	Boston, Mass	82	Pubnico, N. S	123 00
Mildred Robinson	"	86	Canso, N. S	129 00
Thos. S. Gorton	Gloucester, Mass	92	Arichat, N. S	138 00
Dora A. Lawdon	"	93	Yarmouth, N. S	139 50
Valkyrie	"	104	Shelburne, N. S	156 00
Onata	Boston, Mass	105	North Sydney	157 50
Jas. R. Clark	Beverly, Me	43	Yarmouth, N. S	64 50
Preceptor	Gloucester, Mass	89	White Haven, N. S	133 50
Gladiator	"	75	Canso, N. S	112 50
Titania	"	77	Shelburne, N. S	115 50
Atlanta	"	75	Canso, N. S	112 50
Mooween	Duxburg	83	Arichat, N. S	124 50
Jas. A. Garfield	Gloucester, Mass	50	Port Hawkesbury	75 00
Mary Edith	Boston, Mass	51	Liverpool, N. S	76 50
John R. Bradley	Gloucester, Mass	80	Tusket Village	120 00
Fannie A. Smith	"	87	Amherst, Mag. Is	131 37
Jennie B. Hodgden	"	85	Yarmouth, N. S	127 50
Elizabeth N	Bucksport	153	St. Peters, P. E. I	153 00
Agnes	Gloucester, Mass	75	North Head, N. S	112 50
Paragon	"	80	St. John, N. B	120 00
Lillian	Boston, Mass	95	North Sydney	142 60
M. U. Nunan	Cape Porpoise	43	Liverpool, N. S	64 50
H. F. Curtis	Gloucester, Mass	85	Shelburne, N. S	127 50
T. M. Nicholson	Bucksport, Me	90	Arichat, N. S	135 00
Metamora	Boston, Mass	81	Canso, N. S	121 50
Patriot	Gloucester, Mass	58	Lunenburg, N. S	87 00
Oliver F. Kilham	Salem, Mass	43	Liverpool, N. S	64 50
Gladys & Sabra	Beverly, Mass	50	"	75 00
Teazar	Gloucester, Mass	61	Shelburne, N. S	91 50
Susan & Mary	Boston, Mass	85	Sand Point, N. S	124 50
Atalanto	Gloucester, Mass	74	Louisburg, N. S	111 00
Waldo L. Stream	"	81	Halifax, N. S	121 50
James R. Clark	Beverly, Mass	43	Yarmouth, N. S	64 50
Smuggler	Gloucester, Mass	91	Lockeport, N. S	136 50
Hazel R. Hines	"	79	Pubnico, N. S	118 50
Theodore Roosevelt	"	90	"	135 00
Senator Gardner	"	94	Yarmouth, N. S	141 00
Viola	Beverly, Mass	14	"	

List of Untited States Fishing Vessels to which Licenses were issued, &c.—*Con.*

Vessel,	Port of Registry.	Tonnage.	Port of Issue.	Amount.
				$ cts.
J. R. Bradley	Gloucester, Mass	80	Tusket Wedge, N. S.	120 00
Arkona	"	97	Liverpool, N. S	145 50
Mabel D. Hines	"	92	Tusket, N. S.	138 00
Athelete	"	96	"	144 00
Orinoco	"	88	"	132 00
Bohemia	"	86	"	129 00
Blanche	"	78	"	117 00
Effie M. Morrissey	"	83	Digby, N. S.	124 50
J. J. Flaherty	"	124	Tusket Wedge, N. S.	186 00
Claudia	"	79	Liverpool, N. S.	118 50
Tattler	"	205	Shelburne, N. S.	202 50
Anne M. Parker	"	206	"	150 00
Maxine Elliot	"	75	Lockeport, N. S.	112 50
				9,794 70

Statement of Minor Revenue collected during the Year ended March 31, 1909—Sick Mariners Dues.

PROVINCE OF QUEBEC.

Gaspé	$ 117 24
Montreal	8,036 27
Paspebiac	253 66
Percé	109 24
Quebec	6,226 80
Rimouski	300 35
St. Armand	1 96
St. Johns	1,638 23
Sorel	17 88
Three Rivers	370 47
	$17,072 10

PROVINCE OF NEW BRUNSWICK.

Bathurst	$ 76 60
Campbellton	750 90
Chatham	1,181 19
Dalhousie	426 02
Fredericton	8 16
Moncton	539 00
Newcastle	396 42
Sackville	211 91
St. John	6,506 45
St. Stephen	161 72
	$10,258 37

STATEMENT of Minor Revenue collected during the Year ended March 31, 1909—Sick Mariners Dues—*Concluded.*

PROVINCE OF NOVA SCOTIA.

Amherst	$ 366 84
Annapolis	209 05
Antigonish	0 54
Arichat	25 92
Baddeck	112 81
Barrington	28 37
Glace Bay	3 00
Canso	202 59
Digby	111 19
Halifax	11,091 89
Kentville	50 30
Liverpool	155 64
Lockeport	5 30
Lunenburg	581 91
North Sydney	1,066 36
Parrsboro	621 19
Pictou	243 90
Port Hawkesbury	292 08
Port Hood	55 80
Shelburne	70 14
Sydney	2,993 42
Truro	1 88
Weymouth	199 24
Windsor	1,106 04
Yarmouth	512 56
	$20,108 06

BRITISH COLUMBIA.

Nanaimo	7,445 60
New Westminster	94 58
Prince Rupert	238 98
Vancouver	2,967 65
Victoria	8,978 28
	$19,725 09

PROVINCE OF PRINCE EDWARD ISLAND.

Charlottetown	238 35
Summerside	81 49
	$319 84

GRAND TOTALS BY PROVINCES.

Quebec	$17,072 10
New Brunswick	10,258 37
Nova Scotia	20,108 06
British Columbia	19,725 09
Prince Edward Island	319 84
Grand Total	67,483 46

STATEMENT of Steamboat Inspection Dues Collected for the Fiscal Year Ended March 31, 1909.

PROVINCE OF ONTARIO.

Name of Port.		Amount.
Sault Ste. Marie	$ 45 68	
Windsor	138 40	
Total		$ 184 08

PROVINCE OF QUEBEC.

Montreal	$ 30 40	
Quebec	498 32	
Total		$ 528 72

PROVINCE OF NEW BRUNSWICK.

New Brunswick	Nil.

PROVINCE OF NOVA SCOTIA.

Halifax	$ 2,572 08	
Kentville	582 40	
North Sydney	92 40	
Total		$ 3,246 88

PROVINCE OF BRITISH COLUMBIA.

Vancouver	$ 1,546 24	
Victoria	447 04	
Total		$ 19,932 28
Grand Total		$ 5,952 96

STATEMENT of Marine Register Fees collected for the Fiscal Year ended March 31, 1909.

PROVINCE OF ONTARIO.

Name of Port.		Amount.
Hamilton	$ 0 20	
Kingston	1 68	
Picton	1 64	
St. Catharines	1 50	
Toronto	1 64	
Total		$ 6 30

STATEMENT of Marine Register Fees collected for the Fiscal Year ended March 31, 1909—*Concluded.*

PROVINCE OF QUEBEC.

Montreal	$ 7 00	
Quebec	11 02	
Total		$ 18 02

PROVINCE OF NEW BRUNSWICK.

St. Stephen	$ 0 25	
Total		$ 0 25

PROVINCE OF NOVA SCOTIA.

Halifax	$ 3 08	
Liverpool	0 45	
Lunenburg	4 80	
Shelburne	1 08	
Yarmouth	1 52	
Total		$ 10 93

PROVINCE OF MANITOBA.

Winnipeg	$ 5 20	

PROVINCE OF BRITISH COLUMBIA.

Victoria	2 12	

PROVINCE OF PRINCE EDWARD ISLAND.

Charlottetown	1 60	
Grand total		$ 44 42

STATEMENT of Lighthouse and Coast Dues collected for the Fiscal Year ended March 31, 1909.

PROVINCE OF NOVA SCOTIA.

Name of Port.	Amount.
Halifax	$ 663 00

RESUME OF MINOR REVENUE.

Sick Mariners' Fund	$67,483 46
Steamboat Inspection Fund	5,952 96
Marine Register Fees	44 42
Signal Station Dues	663 00
Grand total	$74,143 84

APPENDIX No. 7.

METEOROLOGICAL SERVICE.

MAGNETIC OBSERVATORY.

Acting Deputy Minister of Marine and Fisheries.
Ottawa.

SIR,—I have the honour to submit the annual report of the Magnetic Observatory, Agincourt.

Mr. Menzies has continued as observer in charge of this observatory and his zealous attention to duty has resulted as in past years in an almost unbroken record of magnetic changes and he has acted as instructor to many survey officers who have visited the observatory.

The magnetic variometers have been kept in constant operation and the hourly ordinates of declination and horizontal force obtained from the photographical traces have been reduced and tabulated. Weekly absolute determinations of the declination and dip of the needle and fortnightly of the horizontal force have been made in order to check the base line values and determine any changes occurring from loss of magnetism and other instrumental alternations. The magnetic declination has increased in the year by 5′·6 from 5° 52′·6 to 5° 58′·2 west. The horizontal component has decreased slightly while the dip has remained almost stationary at 74° 37′·4. From April to the close of August there were no pronounced magnetic disturbances but a period of disturbance then set in and during September the magnets were almost constantly in motion and large magnetic storms were registered on the 11th and 12th and from the 28th to 30th. From October and through the winter months the magnets at times showed abnormal movements, but the only pronounced disturbances occurred on the last two days of January and from the 26th to 28th of March. Many surveyors and other observers have visited the observatory in order to obtain either base station values for their instruments or to obtain instruction in the use of instruments.

In July last, an observer, Mr. W. E. Jackson, who has been attached to the central office staff for some years was assigned for duty as magnetic and meteorological observer on the D.G.S. *Arctic,* which has been wintering in high latitudes. His instructions were to build a small observatory ashore and devote as much time as possible to magnetic observations.

I have the honour to be,
Your obedient servant,

R. F. STUPART.
Director.

METEROLOGICAL SERVICE.

METEOROLOGICAL OFFICE,
TORONTO, June 19, 1909.

Acting Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit the thirty-eighth annual report of the meteorological service, this report being for the fiscal year ended March 31, 1909, with Appendices A and B, reports of the St. John and Quebec observatories.

The number of persons in receipt of pay from the meteorological service during the year for various services performed in connection therewith was 238. Of this number, 24 are employed permanently in the Central office, and with a few others at outside stations have devoted their whole time to the work of the service; others are employed in observing during only a portion of each day, and others again are employed only to attend to the display of storm signals when notified.

There are now in the Dominion 445 stations supplied with more or less complete equipment for meteorological observations, and during the year 410 observers have furnished either daily, weekly or monthly reports to the Central office. At 39 stations where the observers are paid salaries, two or more observations are taken daily, and those taken in the morning and evening are reported by telegraph to Toronto. At 58 other points, chiefly in outlying districts, the observers also receive some remuneration for a more or less extended series of observations. Special observations during the summer months are collected at Winnipeg by telegraph from 25 stations in the western provinces, and together with other information sent from Toronto are embodied in a weather bulletin which is widely disseminated from Winnipeg westward; for this bulletin service remuneration is allowed. Eighty-five persons are paid as storm signal agents, and seven for special duties in connection with the time service.

Over 200 observers report voluntarily, and the thanks of the service are due to these persons who contribute so much valuable information regarding the climate of the Dominion.

CENTRAL OFFICE.

During the past year the work of the central office has been carried on under somewhat unfavourable conditions in temporary quarters, pending the completion of the new meteorological building. The records have been kept in a university building, the workshop and instrument supply department in a building near the old observatory site, and the meteorological reference library has been mostly packed away in boxes. The staff has been increased by the addition of one clerk, Mr. Arthur Ough, and during the summer months several university undergraduates were employed to assist in preparing the annual climatological report.

WEATHER FORECASTING

Weather forecasts covering 36 hours in advance and sometimes a longer interval are issued twice daily throughout the year. The weather charts on which the forecasts are based, have entered on them, information obtained by telegraph from 37 stations in Canada and 64 stations in the United States, also from St. John's, Newfoundland and from Bermuda. The forenoon chart is ready for inspection ordinarily about 9.45, a.m., and the forecast official having drawn the isobars, first issues a bulletin for the maritime provinces, including forecasts for the current and following day for Nova Scotia, New Brunswick and Prince Edward Island and also for vessels leaving for the Grand Banks and for American ports. Then follows a forecast for the western provinces which is telegraphed without delay to Winnipeg, where a local agent who has meanwhile received weather telegrams from some 25 points additional to those received in Toronto, prepares a bulletin, giving a general synopsis of existing weather conditions and also includes all weather reports received, together with the forecasts from Toronto. This bulletin is then distributed in Winnipeg and telegraphed to the more important centres in the prairie provinces. The central office forecast official lastly prepares a bulletin for Ontario and Quebec which is usually despatched about 10.10 and is published very widely by the afternoon press as well as being posted at telegraph offices, post offices and other frequented places. At all the larger towns in these provinces a special effort has been made to have these bulletins exposed on wharfs and docks within easy reach of shipping people and fishermen.

The evening weather chart like that of the morning is usually ready for inspection about 9.45 and with as little delay as possible a bulletin is prepared for the press and forecasts are issued for all parts of the Dominion exclusive of British Columbia, in which province a local officer under the direction of the superintendent at Toronto issues the forecasts for the Pacific coast. The forecasts are distributed by the telegraph companies to most of the telegraph offices in the Dominion and by arrangement are posted up in a frame hung in a conspicuous place, and nearly every morning journal publishes them, generally on the front page.

During the winter months a very large number of special forecasts were made for shippers of perishable goods, inquiries being received by both telephone and telegraph. Indeed it is certain that a majority of the shippers of such goods in the Dominion now consult the weather service before sending forth consignments.

Special warnings of snow and drift were issued to all Canadian railways whenever it was deemed advisable to do so and various electric railways have made a practice of consulting the central office as to the weather of the coming night, the information supplied enabling them to reduce the working staff on duty to a minimum or on the other hand to take unusual measures to prevent snow blockade.

During the late autumn many telegrams were received from vessel masters wishing to cross the lakes, requesting special forecasts as to probable winds and weather and indeed in some cases asking as to the advisability of starting; also during the autumn several dredges and unseaworthy tows were safely taken from port to port under advice by telephone and telegraph from the Meterological Office, the captains remaining in shelter until advised that the winds for a definite period would be light or moderate.

Between April 1, 1908, and March 31, 1909, 1,555 warnings were issued to Canadian ports and of these 89·8 per cent verified. The number of storm signal stations increases annually and applications are being continually received for still more stations. There were fewer storms during the year than the preceding one, but many gales of more or less severity were of course experienced; 102 of the total of 131 being credited to the months of November, December, January, February and March. The warnings were for the most part eminently satisfactory, and few storms occurred without ample notice of their approach being given.

The accompanying table shows the number of weather forecasts issued for each of the various districts and the percentage of verification.

NUMBER of predictions and percentage of fulfilment in each district for the year ended March 31, 1909.

Month.	ALBERTA.					SASKATCHEWAN.					MANITOBA.					LAKE SUPERIOR.					GEORGIAN BAY.				
	Number of forecasts.	Verified.				Number of forecasts.	Verified.				Number of forecasts.	Verified.				Number of forecasts.	Verified.				Number of forecasts.	Verified.			
		Number fully.	Number partly.	Number not.	Percentage.		Number fully.	Number partly.	Number not.	Percentage.		Number fully.	Number partly.	Number not.	Percentage.		Number fully.	Number partly.	Number not.	Percentage.		Number fully.	Number partly.	Number not.	Percentage.
1908.																									
April	75	59	9	7	84·7	75	61	11	3	88·7	77	67	4	6	87·0	115	97	11	7	89·1	128	106	11	11	87·0
May	78	66	6	6	88·5	76	60	8	8	84·2	80	51	11	12	76·2	102	76	21	5	84·8	114	88	13	13	82·9
June	75	44	20	11	72·0	77	59	12	6	84·4	78	58	14	6	83·3	98	69	17	12	79·1	125	110	13	2	93·2
July	84	73	9	2	92·3	84	71	10	3	90·5	85	70	10	5	88·0	124	98	20	6	87·1	129	109	14	6	89·9
August	77	57	17	3	85·1	79	60	14	5	81·8	81	67	13	1	90·7	122	88	26	8	82·8	125	106	17	2	91·6
September	88	70	14	4	87·5	89	69	15	5	85·9	90	76	10	4	90·0	115	85	22	8	83·5	120	107	12	1	94·2
October	81	65	11	5	87 0	81	63	11	7	81·6	85	65	16	4	85·9	118	84	14	20	77·1	135	108	22	5	88·1
November	76	64	9	3	90·1	80	69	9	2	91·8	86	69	10	7	86·0	115	93	13	9	86·5	119	98	15	6	88·6
December	83	67	14	2	89·1	83	71	9	3	90·9	89	77	8	4	91·0	124	87	28	9	81·4	130	106	19	5	88·8
1909.																									
January	78	57	13	8	81·4	78	61	10	7	84·6	80	57	14	9	80·0	98	80	16	2	89·8	114	95	17	2	90 8
February	77	59	16	2	87·0	77	63	13	1	90·3	76	62	11	3	88·8	93	78	13	2	90·9	105	89	14	2	91·4
March	81	69	12	0	92·6	81	70	9	2	92·0	81	63	16	2	87·6	91	77	12	2	91·2	112	95	12	5	90·2
Totals	953	750	150	53	86·6	960	777	131	52	87.8	988	785	140	63	86·5	1315	1012	213	90	85·0	1456	1217	179	60	89·7

NUMBER of predictions and percentage of fulfilment in each district, for the year ended March 31, 1909.

Month.	LOWER LAKES.					OTTAWA VALLEY.					UPPER ST. LAWRENCE.					LOWER ST. LAWRENCE.				
	Number of Predictions.	Verified.				Number of Predictions.	Verified.				Number of Predictions.	Verified.				Number of Predictions.	Verified.			
		Number fully.	Number partly.	Number not.	Percentage.		Number fully.	Number partly.	Number not.	Percentage.		Number fully.	Number partly.	Number not.	Percentage.		Number fully.	Number partly.	Number not.	Percentage.
1908.																				
April	128	100	18	10	85·2	111	93	10	8	88·3	111	94	8	9	88·3	121	105	12	4	91·7
May	119	91	16	12	83·2	93	69	10	14	79·6	93	68	9	16	77·9	97	66	15	16	75·8
June	125	113	11	1	94·8	105	93	10	2	93·3	105	91	12	2	92·4	121	96	24	1	89·3
July	129	108	16	5	89·9	119	106	11	2	93·7	119	107	11	1	94·5	123	104	16	3	91·0
August	125	109	14	2	92·8	117	98	18	1	91·4	117	101	16	0	93·2	120	101	14	5	90·0
September	122	109	12	1	94·3	117	98	17	2	91·0	117	100	15	2	91·9	116	94	15	7	87·5
October	137	109	21	7	87·2	114	90	16	8	86·0	114	93	14	7	87·7	130	101	17	12	84·2
November	119	99	13	7	88·6	116	98	11	8	88·5	117	93	13	10	85·8	110	88	15	7	86·8
December	130	110	17	2	91·9	119	87	29	3	85·3	119	92	26	1	88·2	120	96	17	7	87·1
1909.																				
January	114	99	14	1	93·0	98	72	20	6	83·7	98	71	21	6	83·2	102	75	21	6	83·8
February	105	91	12	2	92·4	96	73	19	4	85·9	97	80	14	3	89·7	98	79	16	3	88·8
March	112	93	13	6	88·8	101	79	16	6	86·1	101	80	17	4	87·4	109	84	20	5	86·2
Totals	1,465	1,231	177	56	90·1	1,306	1,056	187	64	88·0	1,308	1,070	176	61	88·5	1,367	1,089	202	76	87·0

NUMBER of predictions and percentage of fulfilment in each district, for the year ended March 31, 1909.

Month.	GULF.					MARITIME WEST.					MARITIME EAST.					TOTALS.				
	Number of Predictions.	Verified.				Number of Predictions.	Verified.				Number of Predictions.	Verified.				Number of Predictions.	Verified.			
		Number fully.	Number partly.	Number not.	Percentage.		Number fully.	Number partly.	Number not.	Percentage.		Number fully.	Number partly.	Number not.	Percentage.		Number fully.	Number partly.	Number not.	Percentage.
1908.																				
April	121	105	14	2	92·6	128	100	14	14	83·6	128	107	9	12	87·1	1,318	1,094	131	93	88·0
May	100	73	12	15	79·0	99	80	11	8	86·4	99	82	9	8	87·4	1,150	873	144	133	82·2
June	123	83	37	3	82·5	121	100	20	1	90·9	121	96	23	2	88·8	1,274	1,012	213	49	87·8
July	124	101	18	5	88·7	123	102	18	3	90·2	123	96	22	5	87·0	1,366	1,145	175	46	90·2
August	118	97	20	1	90·7	118	88	21	9	83·5	118	90	21	7	85·1	1,317	1,062	211	44	88·6
September	118	87	27	4	85·2	117	92	23	2	88·5	117	90	19	8	85·0	1,326	1,077	201	48	88·8
October	130	100	19	11	84·2	132	97	29	6	84·5	132	97	27	8	83·7	1,389	1,072	217	100	85·0
November	110	93	9	8	88·6	115	98	9	8	89·1	115	94	15	6	88·3	1,278	1,056	141	81	88·1
December	127	103	13	11	86·2	138	99	22	17	79·7	138	89	33	16	76·4	1,400	1,085	235	80	88·9
1909.																				
January	101	71	20	10	80·2	114	89	20	5	86·8	114	89	21	4	87·3	1,189	916	207	66	85·7
February	98	84	13	1	92·3	104	84	17	3	88·9	104	84	17	3	88·9	1,130	926	175	29	89·7
March	109	83	22	4	86·2	116	96	16	4	89·6	117	93	19	5	87·7	1,211	982	184	45	88·7
Totals	1,379	1,080	221	75	86·5	1,425	1,125	220	80	86·7	1,426	1,107	235	84	85·9	15,348	12,300	2,234	814	87·4

NUMBER of predictions and percentage of fulfilment in each district, for the year, March 31, 1909.

MONTH.	VICTORIA AND VICINITY.					LOWER MAINLAND.					TOTALS.				
	Number of Forecasts.	Verified.				Number of Forecasts.	Verified.				Number of Forecast.	Verified.			
		Number fully.	Number partly.	Number not.	Percentage.		Number fully.	Number partly.	Number not.	Percentage.		Number fully.	Number partly.	Number not.	Percentage.
1908.															
April	113	80	11	22	75·7	106	79	12	15	80·2	219	159	23	37	78·9
May	112	90	7	15	83·5	106	81	9	16	80·7	218	171	16	31	82·1
June	125	103	8	14	85·6	125	104	6	15	85·6	250	207	14	29	85·6
July	131	116	4	11	90·1	135	116	10	9	89·6	266	232	14	20	89·9
August	140	115	5	20	83·9	137	114	11	12	87·2	277	229	16	32	85·5
September	102	85	4	13	85·3	98	77	9	12	83·2	200	162	13	25	84·2
October	112	78	11	23	74·6	108	82	10	16	80·6	220	160	21	39	77·5
November	101	79	5	17	80·7	98	81	1	16	83·2	199	160	6	33	81·9
December	117	84	8	25	75·2	107	84	3	20	79·9	224	168	11	45	77·5
1809.															
January	117	88	8	21	78·6	110	85	5	20	79·5	227	173	13	41	79·1
February	108	77	11	20	76·4	105	76	10	19	77·1	213	153	21	39	76·8
March	104	73	10	21	75·0	102	77	11	14	80·9	206	150	21	35	77·9
Totals	1,382	1,068	92	222	80·6	1,337	1,056	97	184	82·6	2,719	2,124	189	406	81·6

During the past few months at the request of the government of Newfoundland arrangements have been completed whereby that colony will shortly receive storm warnings and forecasts from the central office of the Canadian service, special bi-daily bulletins being issued daily to that colony by telegraph from Toronto to a distributing agent in St. Johns.

Last summer a full meteorological equipment was furnished to each of six stations between the Athabaska river and the Arctic sea, namely, Fort McMurray, Hay river, Fort Norman, Fort Good Hope, Fort Simpson and Fort Macpherson, and from reports received recently by winter mail from the north it is evident that these outlying posts will furnish most valuable data not only as regards the path of storms across America, but also as regards the mean distribution of pressure in high latitudes.

The publications issued have been a daily weather map; a monthly weather map; the monthly Weather Review and an annual climatological report, which latter is a volume of 633 pages and represents an enormous amount of computation in the central office.

Reports and exchanges have been received with regularity from the meteorological bureaus of all countries, but owing to the temporary removal of the meteorological office last year and the prospective removal to the new building during the present summer, our library arrangements are much disarranged and in a thoroughly unsatisfactory condition.

INSPECTION.

As many stations as possible were inspected during the year but many others again had to remain without the requisite inspection.

The director visited certain portions of the Dominion more especially in the interests of the time service at St. John and Halifax, also that of Quebec.

The assistant director installed the new pattern electrical wind gauges at desirable points in the western provinces and in British Columbia, also at Pelee island on Lake Erie and instructed the provincial officers for Saskatchewan and Alberta. At the commencement of the present year he was deputed to proceed to Newfoundland and inaugurate the meteorological service for the Newfoundland government.

Inspectors Allan and H. V. Payne visited stations in the Gulf of St. Lawrence and in Ontario respectively and Mr. W. E. Jackson was selected to accompany the *Arctic* on her long cruise to the far north.

SOLAR WORK.

Owing to the demolition of the old magnetic observatory at Toronto early last spring, the 6-inch equatorial telescope was dismounted and the daily record of solar disturbance as indicated by sun spots had to be discontinued. The instruments will shortly be again mounted and a much more systematic and closer study of solar disturbance by telescope and spectroscope will be commenced and carried on, together with measurements of solar radiation as registered by an Ångström pyrheliometer.

Investigation as to the more direct causes leading to variations in the character of corresponding seasons in different years, has led to a conviction that in order to obtain results the circulation of the atmosphere must be studied as a whole as there is strong indication of inter-relationship between the intensity and position of the extra-tropical belts of high pressure and the formation of anticyclones in high latitudes. It does not appear improbable that tropical barometric gradients may be the pulse which first responds to a varying solar radiation and reacts on pressure distribution.

The Milne seismographs at Victoria and Toronto have been kept in operation throughout the year, 55 disturbances being recorded by the former and 46 by the

latter. The Calabrian quake was recorded by both instruments, the preliminary tremors arriving at Toronto two minutes earlier than at Victoria, while, however, the latter showed somewhat the larger movement. It is proposed to install very shortly improved open scale recorders for the seismographs, in place of the old pattern now in use, it having been shown by Dr. Milne that with the newer type of instruments, minute preliminary tremors are recorded which with the more slowly moving surface are frequently lost by halation. The seismograph in use by the Meteorological Service are of the type approved and adopted by the B.A.A.S. Committee of Seismology.

TIME SERVICE.

The time service in connection with the Meteorological Service has been maintained most satisfactorily and time balls have been dropped daily, except Sundays, during the season of navigation at Montreal, Quebec and Halifax; a time gun has been fired at Vancouver and the fire alarm bells struck at Toronto. A new time ball tower has been erected at Halifax.

At Toronto during the year ending March 31, 1909, 95 observations for time were made in the meridian with the transit instrument; of these 78 were stellar and 17 solar observations. The positions of the stars were as usual those given in the 'Berliner Jahrbuch.'

Preparations for the removal of the transit instrument—chronograph and clocks—to their new quarters in the transit and clock building adjoining the new observatory on Bloor street was made in December, 1908. The Sidereal clock was stopped on the 16th, dismounted, thoroughly overhauled, cleaned and placed in its new position on December 23, the mean time clock being kept in its old position until the sidereal clock had been mounted and brought to its normal rate.

The transit instrument was dismounted on December 18 and put on its new pier in the transit room adjoining the clock room the same day, and finally adjusted into position by the 29th. The mean time clock was then dismounted, cleaned and put on its pier in the same room with the sidereal clock.

Both these clocks are on separate brick piers on concrete foundations down to the clay and welled in from the surrounding soil and building.

The transit pier has been carefully put up, being a stone cylinder 19 inches in diameter and about 6 feet long, embedded in concrete foundation built several feet in the clay and welled similar to the clock piers. The transit instrument is bolted to an oval slate slab, 1½ inches thick, placed on top of the pier.

The new transit and clock building has proved to be a great improvement upon the old building.

The 6-inch equatorial telescope was dismounted early in April, 1908, to allow the old tower to be pulled down. This instrument has been packed away awaiting the completion of the new tower in the new building on Bloor street.

The difference in latitude and longitude between the transit piers of the old and new observatories has been determined by triangulation, the new pier being 24·9 seconds north and 0·95 seconds west of the old pier, the new latitude and longitude being: Latitude, 43° 40′ 0·8″ N.; longitude, 5 hrs., 17 mins., 35·60 secs. W.

A large amount of transit work has been done in the new position, the clocks being gradually brought into their normal rates. The time exchanges with Quebec, Montreal and St. John, N. B., have been continued, also the time given to the Agincourt observatory and generally when required. A new improved switch-board, with all the necessary electrical connections on the clock, has been installed, as has also the fire-alarm time signal.

THE following Table shows the difference between the Times at Quebec, Montreal and St. John at the various time exchanges compared with that at Toronto. The sign + indicates that Toronto is slow of the other observatories.

Year.	Quebec.	Montreal.	St. John.
1908.	Seconds.	Seconds.	Seconds.
April 24	+0·21	+0·58	+0·15
May 22	−0·92	+0·77	−0·76
June 5	−1·26	−0·32	−1·07
" 19	−0·47	−0·30	.....
July 10	−0·92	−0 69	−0·39
" 24	−0·88	−0·62	−0·58
August 7	+0·40	−0 63	−0·32
" 21	−1·16	−0·52	−0·51
September 18	−1·15	−0·02	.....
October 16	−0·48	.....	+0·56
November 6	−1·06	.....	+1·28
1909.			
* March 13	+0·21	.....	+0·73

* Exchange from the new transit building. The Latitude and Longitude of the new transit pier is :—
Latitude 43° 40′ 0·8″ N.
Longitude 5h. 17m. 35s. 60 W.

All of which is respectfully submitted.

R. F. STUPART,
Director.

APPENDIX A.

METEOROLOGICAL SERVICE, ST. JOHN OBSERVATORY,
ST. JOHN, N.B., July 1909.

R. F. STUPART, F.R.S.C.,
Director, Meteorological Service,
Toronto, Ont.

SIR,—I have the honour to present my annual report on the St. John observatory for the fiscal year ending March 31, 1909.

Meteorological Service.—The usual meteorological observations, records and reports have been continued without interruption. The various eye-reading and self-registering instruments, including electric rainfall register and wind recording apparatus, are in excellent condition. No change has been made either in equipment or method of work. The interest taken by the general public in the information furnished from the observations and records continues. This is evidenced by the largely increased demand individually and from the press.

Weather Bulletin.—As heretofore the morning weather bulletin has been promptly issued each week day, upon receipt of the telegraphic report from Toronto. It is published by the afternoon papers, distributed through the mail and posted in public places. This information of weather conditions, along with the forecasts and warnings of dangerous storms, is a necessity to mariners, shippers of perishable goods, contractors and numerous other interests affected by weather changes. The warnings and forecasts frequently requested through telephone are received and answered at all hours.

The morning forecasts are repeated to St. Martins. Storms warning messages are telephoned to St. Martins and Point Lepreau and signals displayed for use of mariners in those parts of the Bay of Fundy.

Time Service of the Maritime Provinces.—Observations of standard stars with the meridian telescope were made nearly every clear night and with the clock comparisons recorded on the chronograph as previously reported. The time balls at St. John and Halifax have been dropped each week day at 1 p.m., 60th meridian time, excepting at Halifax during the period of erecting new tower and improved apparatus. Daily signals have been sent automatically, direct from our transmitting clock over the Western Union wires, throughout the maritime provinces, for the two minutes ending at 10 a.m., and continue to be most useful to navigators, railways and the public generally. Practically all the time pieces in eastern Canada are regulated by the time of this observatory. At other times than 10 a.m., time signals are frequently asked for by telegraph and telephone, beats from the relay in connection with the transmitting clock being audible locally and through long distance telephones.

Wireless Time Signals.—The apparatus at Camperdown, N.S., Marconi Station, which automatically repeats our time signal from land line to wireless has been maintained in operation throughout the year. Navigators find this method of checking ships' chronometers at sea most practical and useful.

Clocks.—The standard sidereal clock Riefler, No. 94, is mounted in the basement clock room where it is run under constant pressure and temperature. It has been in use continuously throughout the year and gives most satisfactory results. The Kullberg sidereal clock is also mounted in the clock room on a separate pier. The mean time transmitting clock, the chronograph, electrical and other apparatus used in connection with the time service are in the office. The mean time master clock, used for hourly synchronizing clocks on circuit in different parts of the city, is also mounted in the office. There has been considerable extension of this service. Clocks have been installed in public, banking institutions, &c.

The electric clock, in charge of the manager of the Western Union office at Halifax, for use in connection with the time ball service there, was cleaned while the time ball was dismantled. This clock is synchronized daily from the observatory and automatically sends the signal to drop the ball at 1 p.m. It is fitted with a break circuit attachment for sending a return signal to St. John and comparisons on our chronograph with standard rarely show an appreciable difference.

Halifax Time Ball.—In accordance with your instructions to arrange for the construction and installation of a new time ball for Halifax to replace the temporary apparatus which had been in operation since October 1, 1904, I at once proceeded with the plans and specifications for tower and machinery. Towards the end of April the temporary apparatus was dismantled and construction of new tower commenced. The ball, outside guides and machinery, were contracted for, constructed and set up by W. W. Howell & Company, of Halifax. The electric release was made by the Vaughn Electric Company, St. John and the tower built under contract by Walter Lownds of Halifax. The whole apparatus was finally completed on July 31, and put in operation on August 1. The time ball machinery was patterned after that for many years in use at St. John, it being more suitable to the climatic conditions prevailing during winter months than a ball moving on a staff which frequently failed, owing to sleet, snow or ice.

The ball is 3 feet 8 inches in diameter, constructed of 16-oz. copper, with a reinforcing band of copper ⅛-inch thick and 6 inches wide riveted and soldered around the centre. It is firmly attached to a piston head which drops into an iron cylinder of 15 inches internal diameter and 12 feet in length. When the ball is hoisted full elevation, it is held by a brake. At the instant of 1 o'clock brake is electrically released and ball

drops rapidly at first, then gradually settles down as the air compresses in bottom of cylinder, which is fitted with air valves to control the drop. During the past winter little or no trouble was experienced and the frequent failures of the old appartus avoided.

I have the honour to be, sir,
Your obedient servant,

D. L. HUTCHINSON,
Director, St. John Observatory.

APPENDIX B.

QUEBEC, April 26, 1909.

The Director,
Meteorological Service,
Toronto.

SIR,—I have the honour to transmit my annual report for the fiscal year ending March 31, 1909.

All the meteorological observations have been taken three times daily as heretofore, and the bi-hourly temperatures continued at the Citadel.

Standard stars were observed on every fine night, and the correct time given to the city by means of the noon gun, and by telephone. The number of calls, which has increased constantly during the past few years, has reacehd the enormous number of nearly 8,000 in 1908, and on many occasions interfered with my daily work.

The time ball was dropped in a satisfactory manner during navigation season.

During my inspection in the month of November last, I found that certain repairs were necessary to keep the whole apparatus in good working order, and a special report was sent accordingly.

These repairs were made as authorized, before the opening of navigation this year.

All the meteorological instruments are in good order, but the sunshine recorder would require a new post, the old one being rotten.

The transit instrument is now rather old, and the foundations are not properly fixed to the ground. I often noticed considerable changes in deviation and inclination, especially at the beginning of winter and during the spring.

The equatorial telescope, which was purchased from Alvan Clarke, of Boston, in 1864, would require some repairs, but, before putting it in good order the tower should also be repaired and the old dome replaced, to protect the instrument.

The whole respectfully submitted.

ARTHUR SMITH,
Director.

APPENDIX No. 8.

HYDROGRAPHIC SURVEY.

OTTAWA, July 20, 1909.

SIR,—I have the honour to respectfully submit the following report upon the operations of the Hydrographic Survey for the fiscal year 1908-9.

During the period above mentioned the following parties were actively engaged in the field: on the great lakes, under Captain F. Anderson; on the Atlantic coast, under Captain Irving Miles; on the Pacific coast, under Captain P. C. Musgrave; upon Lake of Two Mountains, under Mr. A. J. Pinet, and in Cumberland Basin, under Mr. Chas. McGreevy. The survey of the St. Lawrence river between Montreal and Quebec being completed, only such field work was performed as was found necessary to obtain information regarding recent changes or improvements.

Great Lakes: the steamer *Bayfield* under command of Captain F. Anderson, assisted by Messrs. A. G. Bachand, A. E. Humphrey and R. J. Fraser, left Owen Sound on May 10 and proceeded to Lake Superior to take up work in the eastern approaches to Nipigon bay, and continued there until August 1, when a move was made to carry on the triangulation and the traverse of the shore from Simmons harbour to Isacor point to obtain a more correct delineation than is shown on the existing charts. This was completed and the vessel laid up at Owen Sound on November 23.

The north shore of Lake Superior from Pigeon river (the boundary line between Canada and the United States) to the eastern entrance of Nipigon bay, with the exception of Nipigon and Black bays, has now been carefully and accurately surveyed and charted; that between Simmons harbour and Isacor point, a distance of fifty miles has been traversed and plotted in detail, but no sounding has been done off it. There still remain eighty miles between Wilson island and Simmons harbour and fifty miles between Isacor point and Cape Gargantua as well as Slate islands, Michipicoten and Caribou islands yet to be completed.

During the winter of 1908-9, the staff was employed in plotting the season's work and preparing it for the engraver.

I regret to report that upon June 23, the steamer ran upon a well known rock in the eastern channel into Nipigon bay and sustained damage to the extent of $5,884.13. An investigation was held in Collingwood and the blame was found to rest upon the sailing master and he was discharged and replaced by Captain J. F. Lunan.

Atlantic Coast.—The steamer *La Canadienne* under command of Captain Irving Miles, assisted by Messrs. Chas. Savary, G. C. Venn and W. R. McGee, left Sorel on May 18, and took up the survey of the mouth of Saguenay river, and the St. Lawrence river, between Red island and Razade islands.

A large scale plan of the mouth of Saguenay river was undertaken and completed showing accurately the many shoals and banks obstructing the navigation of this important river. The general work of charting the St. Lawrence river was proceeded with and carried out as far as Razade islands on a scale of two inches to the nautical mile. No important discoveries were made, but with the greater accuracy of detail, the new chart of this important locality cannot fail to be of vast benefit to mariners.

Work is very much delayed in this locality by the strong tides which *La Canadienne* is unable to stem.

The staff was fully occupied during the winter of 1908-9, in plotting the season's work and in preparing sheets for the engraver, two of which will be issued before the spring of 1910.

Pacific Coast.—On April 3, the party under command of Captain P. C. Musgrave, assisted by Messrs. H. D. Parizeau, and L. R. Davies left Victoria by passenger steamer for the Skeena river to take up quarters in camp at Inverness and continue the survey of the southern approach to Prince Rupert harbour and the mouth of Skeena river.

On May 11, Captain Musgrave left camp and returned to Victoria to take over and commission the new steamer *Lillooet.* This was done and the steamer left for her station on June 10. The camp party was moved on board and the survey of Chatham sound, east of Lucy and Rachel islands and from Tree Bluff to Island point, undertaken and completed. This will give two charts on scales of three inches to the nautical mile.

One important result of this survey has been the finding of a shoal head of eleven feet upon Alexandra patch where not less than ten fathoms was supposed to exist and nearly on a direct line between Brown passage and the Coast island range for entering Prince Rupert harbour.

On May 30, the staff was increased by the appointment of Mr. F P. V. Cowley.

The steamer *Lillooet* is the first vessel constructed especially for the Canadian Hydrographic Survey. She was designed by Mr. R. L. Newman of Victoria. B.C., and built by the British Columbia Marine Railways Company, Limited, at Esquimalt, at a cost of $150,000, is 170 feet long, 27 feet in breadth and 15 feet in depth. has a displacement of 760 tons, and she is fitted with twin screws driven by two engines of 800 horse-power, giving a speed of eleven knots per hour. She is equipped with the latest surveying devices and is found to be eminently suited for the service.

During the winter months this party took up offices in Victoria, B.C.,for plotting work and preparing charts for the engraver.

Lake of Two Mountains.—On May 1, this party in charge of Mr. A. J. Pinet, assisted by Messrs. G. B. St. Pierre and Henri Ortiz, left Montreal and resumed operations on the lake using the yacht *Josephine* and a houseboat. Fair progress was made and it is hoped that the survey will be completed in 1909.

Cumberland Basin, N.S.—In May, 1908, a small party in charge of Mr. Chas. McGreevy, assisted by Messrs. Paul Jobin and E. Jodoin, was organized at Amherst, N.S., to undertake a survey of Cumberland basin with a view to supplying charts in more detail for vessels trading to Amherst, &c., on the high water. This method of surveying such waters is not highly satisfactory and it is hoped that when operations are extended a vessel may be available for a base.

This party likewise spent the winter months in the office at Ottawa plotting the season's notes and preparing for the engraver.

In the office, in addition, Mr. Amos assisted by Messrs. Henri Melancon, Fred. Delaute and O. Souliére, has been engaged in preparing a full report upon the operations of the various parties that were engaged in the survey of the St. Lawrence river between Montreal and Quebec, from 1896 to 1906, and the charts resulting from these various surveys.

Work upon the charts of Lake St. Francis has made some progress.

Charts Issued.—During the fiscal year the following charts were engraved and issued to the public: 'Lake St. Peter.' 'White Island to Orignaux Point.' 'Lake St. Louis' and 'Key Harbour, Georgian Bay.'

The following were photolithographed:—

Chart No. 15. Cap Levrard to Ste. Emelie.
" No. 16. Ste. Emelie to Deschambault.
" No. 17. Portneuf to Cap Santé.
" No. 18. St. Croix to St. Antoine.
The second edition of No. 8, Head of Lake St. Peter.
The second edition of No. 7A, Berthierville to Lake St. Peter.

In connection with the St. Lawrence river charts, it was deemed advisable to prepare sailing directions covering the distance, Quebec to Kingston, and for this purpose the services of Captain J. G. Boulton, Retired Royal Navy, of Quebec, were secured to assist the officers in charge of the various branches affected.

Resignations.—At the close of the year the following officers resigned: Mr. Robert Bickerdike, Mr. A. E. Humphrey and Mr. W. R. McGee.

Appointments.—On January 26, Mr. T. L. Killen was appointed stenographer to the survey.

I am, sir, your obedient servant,

WM J. STEWART,
Hydrographer.

APPENDIX No. 9.

REPORT OF THE CHAIRMAN OF THE BOARD OF STEAMBOAT INSPECTION.

CHAIRMAN'S OFFICE, OTTAWA, June, 1909.

To the Acting Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit the annual report of the Steamboat Inspection Service for the fiscal year ending March 31, 1909.

It contains the work of the service during the time stated, giving the number of steamboats inspected in the several divisions and their gross tonnage, with the amount of dues collected from steamers employed in the carriage of passengers between Canadian ports but registered elsewhere than in Canada, and the amount of fees received for engineers' examinations.

At the port of Montreal in addition to the steamers inspected, the ships' tackle and hoisting gear used for loading and unloading the vessels to the number of 343 were also inspected by the steamboat inspectors.

NUMBER of steam vessels reported as known by the Inspectors of Steamboats in the Dominion for the year ending March 31, 1909, also the number of steamers inspected but not registered in the Dominion for the same date.

Division.	Number of Dominion Registered Steamers.	Gross Tonnage of Dominion Registered Steamers.	Number of Steamers Inspected but not Registered in the Dominion.	Gross Tonnage of Steamers Inspected but not Registered in the Dominion.
Toronto	365	85,722	46	54,907
Collingwood	172	75,990	17	29,257
Kingston	160	28,399	19	5,390
Montreal	206	22,161	16	43,479
Sorel	87	28,881	.....	.....
Quebec	109	20,882	10	17,249
Nova Scotia	148	34,648	31	56,741
New Brunswick and Prince Edward Island	156	19,884	8	13,104
Vancouver and Yukon	171	21,028	14	20,836
Victoria, B.C.	149	50,610	22	40,631
Manitoba and Northwest Provinces	174	15,345	1	681
	1,897	403,550	184	282,275

NUMBER of Dominion registered steam vessels inspected and their gross tonnage, with amount of fees collected on account of steamboat inspection during the year ended March 31, 1909.

Division.	Number of Dominion Registered Steamers Inspected.	Gross Tonnage of Dominion Registered Steamers Inspected.	Amount of fees Collected on Account of Steamboat Inspection.
			$ cts.
Toronto	316	82,865	138 40
Collingwood	154	74,163	45 68
Kingston	150	28,040	.....
Montreal	177	15,058	30 40
Sorel	83	27,927	.....
Quebec	105	20,576	458 32
Nova Scotia	146	36,624	3,246 96
New Brunswick and Prince Edward Island	137	18,604	.....
Vancouver and Yukon	154	20,447	1,263 36
Victoria, B.C.	144	46,022	729 92
Manitoba and Northwest Provinces	114	11,844	.....
Engineers' Certificates	.....	.....	2,014 50
Total	1,680	382,170	7,927 54

BOARD MEETINGS AND APPOINTMENT OF INSPECTORS.

Owing to Mr. Richardson retiring from the service as boiler and machinery inspector at Vancouver, Mr. Hugh G. Robinson of that place, having passed the necessary examination, assumed the duties on May 12, 1908, and was appointed to the position by Order in Council of June 2, 1908.

The work having rapidly increased in the British Columbia district it became imperative to increase the staff to meet the demands, and Mr. Wm. J. Callum of Victoria, who passed the required examination was appointed as a boiler and machinery inspector by Order in Council of June 2, 1908, with office located at Victoria, B.C.

In order to meet conditions arising owing to the passing of the Act 7-8 Edward VII, Chapter 65, an Act to amend the Canada Shipping Act, a meeting of a quorum of the Board of Steamboat Inspection was convened at Ottawa, December 1, for the purpose of revising the rules for the examination of engineers, which was adopted and approved by His Excellency the Governor in Council, the 21st day of December, 1908.

Prosecutions with penalties enforced for violation of Part VII. of the Canada Shipping Act, Steamboat Inspection.

On July 25, 1908, a complaint was received by the department, charging that the steamer *Aletha* of Kingston was being overloaded by carrying more passengers than that allowed by her certificate of inspection, and also for plying on a route with an excursion of passengers for which she was not permitted by her certificate of inspection.

The case came up for trial before the police magistrate at Belleville on September 14 and 22, when the captain was fined $175, and costs, on the charge of the vessel plying on a route for which she was not licensed, a cheque for same being received by the department, October 14, 1908.

CASUALTIES.

The following are the casualties reported from the several divisions as having occurred during the year ending March 31, 1909.

TORONTO DIVISION.

May 9, 1908.—The steamer *Brockville* of Montreal, while lying at the wharf at Toronto fitting out, preparatory to being placed in commission, with the fires partially banked, an 8-inch flue in starboard boiler collapsed, whereby four of the crew including the chief engineer were killed. On investigation, it was found the boiler had been shut off from all other connections, with no steam gauge connected to it, and the safety valves had been screwed down so as to render them useless, hence it was impossible to ascertain the pressure to which the flue was subjected which was the cause of the accident.

June 12, 1908.—The steamer *Wenonah,* of Toronto, was totally destroyed by fire on Cecebe lake—cause of fire unknown.

November 21, 1908.—The steamer *City of Mount Clemens,* of St. Catharines, collided with the United States steamer *Neilson* on Lake St. Clair and sank. She was raised and towed about four miles when she again sank east of the old channel at St. Clair flats where she is still lying.

January 16, 1909.—The steamer *Tecumseh* of Sarnia was totally destroyed by fire at Goderich, Ont., which started about 3 a.m., and is supposed to have originated from the kitchen range, which was in use by three people engaged in repairing the steamer and who were living on board, and barely escaped with their lives.

The following steamers stranded or ran aground, viz.:—May 28 and October 13, 1908, the ss. *F. B. Osler,* of Toronto. June 4, 1908, the *City of Montreal,* of Toronto. August 17, 1908, the ss. *Neepawah,* of Port Glasgow, G.B. November 17, 1908, steamer *Bickerdike,* of Ottawa. December 17, 1908, the ss. *Beaverton,* of Newcastle, G.B., all of which were released, placed in dock and thoroughly repaired.

COLLINGWOOD DIVISION.

June 14, 1908.—ss. *J. G. Gidley,* of St. Catharines, was totally destroyed by fire on the south side of Manitoulin island. Cause of fire unknown. No casualties.

October 15, 1908.—The tug *R. A. McLean,* of Sault Ste. Marie, caught fire at Sterling bay and became a total loss. Cause of fire unknown. No casualties.

October 24, 1908.—Steamer *Iroquois,* of Goderich, on her trip from Little Current to Cutler in a dense fog ran on a submerged rock, listed badly, then caught fire and is practically a total loss. Cause of fire is not definitely known. No casualties.

November 1, 1908.—The ss. *Telegram,* of Collingwood, on her trip from Owen Sound to Providence bay, ran ashore and filled with water, then listed and caught fire and was abandoned as a total loss. No casualties.

November 3, 1908.—The tug *W. E. Gladstone,* of Owen Sound, was blown ashore in Lion's Head harbour during a heavy gale and became a total loss. No casualties.

KINGSTON DIVISION.

July 22, 1908.—The ss. *Stranger,* of Port Hope, on a trip from Port Perry to Lindsay was destroyed by fire on Scugog lake. No fatalities occurred.

July 16, 1908.—The steam barge *Robert McDonald,* of Kingston, while plying on Lake Ontario from Peninsular point to Stoney point, was partially destroyed by fire. No fatalities.

MONTREAL DIVISION.

July 9, 1908.—The steamer *Pontiac,* of Ottawa, 116 gross tons, while lying at the wharf at Arnprior, was totally destroyed by fire. No casualties. Cause of fire unknown.

November 10, 1908.—The ss. *Temiscamingue,* of Ottawa, 295 gross tons, while on her trip from New Liskard to Temiskaming, the furnace crown of her boiler, it being of the locomotive type, collapsed, whereby the two firemen and one deck hand were killed by the escaping steam and water; one passenger jumped overboard and was drowned and seven others were badly scalded, including the engineer.

An investigation as to the cause of the accident was held by the chairman of the Board of Steamboat Inspection, when it was clearly demonstrated it was due solely to low water.

QUEBEC DIVISION.

June 6, 1908.—The ss. *Lady Eileen,* of Gaspé, 526 gross tons, when on her trip from Campbellton, N.B., to Gaspé, ran ashore on the New Port island in a dense fog, becoming a total loss. No loss of life.

November 15, 1908.—ss. *King Edward,* while at anchor, was driven ashore by a severe gale of wind in the English bay, Anticosti island. No fatalities.

November 26, 1908.—The passenger steamer *Otranto,* of Quebec, stranded at Bonaventure, becoming a total loss. No casualties.

November, 1908.—Steamer *Rodolphe,* of Montreal, was destroyed by fire at the wharf in Sorel harbour and sank. The cause of fire is unknown. No lives lost. The machinery was taken out of her.

March, 1908.—Steamer *Dream,* of Quebec, was destroyed by ice at Grandes Piles. Machinery was taken out.

NOVA SCOTIA DIVISION.

Casualty returns nil.

NEW BRUNSWICK AND PRINCE EDWARD ISLAND DIVISION.

June 17, 1908.—Steamer *Aberdeen,* of St. John, N.B., caught fire at her moorings, Cole's island, Washademoak lake, and was totally destroyed. No loss of life. Cause of fire unaccounted for.

July 9, 1908, ss. *Arcola* of St. John, N.B., when on a voyage from Great Britain to Chatham, N.B., was wrecked at St. Paul's Island, on the coast of Cape Breton, becoming a total loss. No loss of life.

November, 1908. The ss. *Calluna of* Richibucto, N.B., when on a voyage from Richibucto to St. John, N.B., got lost on Pictou Island and became a total wreck. No casualities.

MANITOBA AND NORTHWEST PROVINCES DIVISION.

June 7, 1908. The steamer *City of Medicine Hat* while on her trip down the Saskatchewan river at Saskatoon, came in contact with telegraph and other wires which too late to go back on account of the strong current, whereby some of the wires getting into the boat's rudder the control of her was lost, and she was carried broadside against a pier of the bridge and broke in two, becoming a total loss. No fatalities.

August 14, 1908. Steamer *La Rien* of Winnipeg, while lying at anchor on the Red river at Winnipeg, caught fire and was totally destroyed. No person being on board at the time. Cause of fire unknown.

August 6, 1908. The steamer *Premier* of Winnipeg, 414 gross tons, while lying at her dock on Lake Winnipeg between one and two a.m., caught fire and was totally destroyed. Three of the crew and five passengers were burned in their staterooms. An investigation was held by Commander Spain, but failed to locate the cause of the fire as supposed to have originated about the boiler.

BRITISH COLUMBIA AND YUKON DIVISION.

The following steamers stranded or ran aground:—On April 23, 1908, ss. *Hope* of Victoria, April 25; ss. *Vadso* of Victoria, October 26; ss. *Iroquois,* November 17; ss. *Owen,* December 5; ss. *Hope* of Victoria. The following steamers were damaged through collision:—September 19, 1908, steamers *Amur* and *Vadso,* of Victoria, November 8, 1908, steamer *Princess Royal,* December 3, 1908; ss. *Charmer,* all of which were repaired, made seaworthy and placed again in commission.

The following steamers stranded and became a total loss:—August 8, 1908, tug *Albatross,* of Victoria; October 15, steamer *Caledonia,* of Victoria; January 12, 1909, steamer *Favorite,* and January 10, 1909, *John P. Douglass,* both of which were caught in ice and destroyed. March 18, 1909, tug *Daisy,* of Victoria, grounded on a reef and slid off into deep water, a total loss.

May 6, 1908. SS. *Otter* of Victoria, on a voyage from Kyuquot to Victoria broke the tail shaft of the engine. She was picked up by steamer *Tees* and towed to Victoria, where a new one was fitted.

March 27, 1909. The gasoline passenger launch *Ariadne,* of Vancouver, caught fire burning to the waters edge, afterwards sinking, a total loss.

January 25, 1909. SS. *Venture* of Victoria, when loading at Inverness, Skeena river, at 2.30 a.m., caught fire, supposed over boilers, and was burned to the water's edge. Hull a total loss.

I am, sir,

Your obedient servant,

E. ADAMS,
Chairman Board of Steamboat Inspection.

APPENDIX 10.

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of Canada.

PRINCE EDWARD ISLAND.

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Alberton Range	William Champion	Oct. 25, 1907	130 00
Block House	A. S. McNeil	Mar. 25, 1901	385 00
Brush Wharf	D. W. McPherson	Jan. 13, 1899	80 00
Crapaud, Outer	Abner J. Howatt	July 22, 1893	130 00
" Inner	James Inman	Aug. 13, 1901	120 00
Cardigan River	John W. Morrison	" 15, 1901	100 00
Cape Bear	Luther Jordan	Apr. 12, 1905	400 00
Cape Egmont	Jos. J. D. Gallant	Oct. 21, 1902	270 00
Cape Tryon	William Bell	Mar. 17, 1905	270 00
Cove Head Range	John A. Kielly	Nov. 27, 1890	90 00
Darnley Range	Geo. W. Wigglns.	Oct. 16, 1896	150 00
Darnley basin	Chas. Taylor	June 14, 1897	75 00
East Point	L. R. J. McDonald	Jan. 18, 1901	760 00
Fish Island	Patrick Gould	Dec. 7, 1906	270 00
Georgetown, Inner	Jesse G. Clark	Aug. 14, 1901	150 00
Georgetown Railway Wharf	John Westaway	Jan. 16, 1906	130 00
Grand River, East Lot 56	Alfred Robertson	Oct. 5, 1898	130 00
Grand Tracadie	J. W. McDonald	May 24, 1901	130 00
Hazard, Inner Range	Angus Beaton	Nov. 21, 1902	75 00
" Outer Range	Daniel McRae	Apr. 6, 1900	80 00
Indian Point	J. S. Allen	May 18, 1898	400 00
Little Channel	William Hardy	" 26, 1875	130 00
Murray Harbour, Inner	Robert Penny	Nov. 11, 1897	70 00
" Outer	Lemuel McLeod	Dec. 21, 1897	70 00
Miminegash, Inner	Elijah Costain	May 18, 1906	70 00
" Outer	Patrick O'Brien	" 14, 1897	75 00
New London	James H. McLeod	Jan. 29, 1896	150 00
North Cape	James Phee	Sept. 4, 1897	345 00
North Rustico	Jos. N. Pino	Feb. 6, 1897	150 00
Orwell	John McDonald	June 25, 1879	80 00
Point Prim	Donald Gillis	Dec. 10, 1897	300 00
Panmure Island	Colin Steele	June 3, 1901	380 00
" F. A	Mathias Condon		380 00
Sandy Island, (Cascumpec)	Jas. C. Tuplin	May 5, 1897	345 00
Savage Harbour	Jas. A. McDonald	July 11, 1889	130 00
Sea Cow Head	M. P. O'Roneghan	Apr. 21, 1873	330 00
Souris, East	John D. Lavie	June 23, 1905	395 00
Summerside Wharf	John Fraser	Apr. 12, 1897	130 00
Summerside Range	George Stavart	Sept. 8, 1895	95 00
St. Andrew's Point	George Connor	June 3, 1901	150 00
St. Peter's Island	James W. Taylor	May 1, 1897	240 00
St. Peter's Harbour	Albert Anderson	July 25, 1900	150 00
Tignish Run	Agapè Gaudet	Aug. 30, 1897	150 00
Warren Farm Range	A. S. McNeil	May 16, 1907	100 00
West Point	William McDonald	Jan. 22, 1876	345 00
Wood Island	Roderick W. McKay	Apr. 11, 1899	295 00
Wood Island Range	James Young	Nov. 14, 1902	95 00
Wright's Range	Charles Wright	June 14, 1894	130 00

SESSIONAL PAPER No. 21

STATEMENT giving Names of Stations and Lightkeepers, &c.—*Continued.*

NOVA SCOTIA.

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Abbott's Harbour Pole	W. H. D'Entremont	May 22, 1888	100 00
Advocate Harbour	John H. Morris.	Aug. 10, 1904	300 00
Amet Island	Lloyd Rogers	Nov. 11, 1902	460 00
Amherst Harbour Range	William Shea	May 21, 1908	180 00
Annapolis	Jos. McMillan	Mar. 1, 1908	100 00
Apple River Light and Fog Alarm	Hill E. Elderkin	" 31, 1905	800 00
Argyle	Chas. A. Amiro	Feb. 6, 1893	460 00
Arichat	Capt. Wm. Lavashe	Oct. 17, 1898	320 00
Arisaig	Hugh R. McAdam	Nov. 14, 1898	130 00
Baccaro	Wm. L. Smith	Janv. 9, 1907	485 00
Barrington Lightship	Capt. Jno. H. Lyons	June 18, 1897	800 00
Battery Point	Henry Naas	Mar. 12, 1897	370 00
Bear River	Wm. Hunt	Apr. 10, 1905	180 00
Beaver Harbour	L. G. Cameron	Feb. 15, 1902	150 00
Bear Island	Michael O'Brien	Dec. 7, 1906	300 00
Beaver Island	W. E. O'Leary	Feb. 22, 1900	460 00
Belliveau Cove	J. H. Belliveau	" 16, 1889	95 00
Betty Island	P. E. Christian	June 29, 1904	530 00
Bird Island	H. C. McKay	May 21, 1901	460 00
Black Rock	Chas. Robinson	Mar. 16, 1885	360 00
Black Rock Point	M. D. Morrison	June 8, 1892	295 00
Boar's Head	F. Ruggles	May 24, 1901	395 00
Bass River	David Vance	Oct. 24, 1907	100 00
Bon Portage	Angus Greenwood	Jan. 14, 1907	420 00
Briar Island Light	J. N. Peters	June 6, 1901	460 00
Briar Island Fog Alarm	B. H. Morrell	" 6, 1901	460 00
Brooklin Pier Pole	F. T. Gardner	Feb. 6, 1885	100 00
Bunker's Island	F. H. Doane	July 27, 1904	395 00
" North End	Jas. H. Schoville	Jan. 16, 1907	240 00
Budget	Freeman Pride	Dec. 7, 1905	240 00
Burnt Coat	Wm. Y. Falkner	June 22, 1898	295 00
Bourgeois Inlet	Marian Burke	Dec. 1, 1902	75 00
Campbell's Island	John A. McDonald	Feb. 16, 1907	140 00
Candlebox Island	Benjamin Leblanc	Nov. 1, 1892	370 00
Canso Harbour and False Passage	Joseph Long	Dec. 31, 1896	370 00
Canso Harbour Range	Wm. J. Mathews	Dec. 17, 1904	240 00
Cape D'Or Fog Alarm	F. H. P. Dewis	Apr. 13, 1898	800 00
Cape Fourchu Light and Fog Alarm	T. S. Doane	Dec. 31, 1904	920 00
Cape George	John Murray	Nov. 3, 1882	265 00
Cape La Ronde	John J. Manger	" 16, 1898	370 00
Cape North	Norman McLeod	Oct. 14, 1899	400 00
Cape Rosebay Light and Fog Alarm	John L. McKenna	Mar. 31, 1899	920 00
Cape Sable " "	Arthur Cunningham	July 16, 1902	920 00
Cape Race " "	John Myrick		1,950 00
Cape St. George	Alex. L. McEachern	Sept. 8, 1898	510 00
Cape St. Lawrence	Chas. Jamieson	" 21, 1893	460 00
Cape St. Mary's	Benj. H. Robichau	July 5, 1886	395 00
Cape Sharpe	Freeman Yorke	June 30, 1902	800 00
Canning River, Inner	Fred Clarke	Apr. 29, 1902	100 00
" Outer	Fred W. Bishop	" 29, 1904	130 00
Cariboo Island	D. Falconer	Dec. 20, 1902	370 00
Carter's Island	Robert McDonald	Jan. 4, 1886	325 00
Caveau Point Range	Germain Chiasson	Aug. 20, 1897	180 00
Charlo Cove Light	Stephen C. Richard	Nov. 4, 1901	170 00
Chebucto Head Light and Fog Alarm	Capt. Richard Holland	Oct. 1, 1906	920 00
Chester Ironbound	Uriah Young	Feb. 15, 1884	460 00
Cheticamp	Marcelin Muise	Nov. 27, 1896	345 00
Cheticamp Range	Philip Burgeois	May 23, 1898	180 00
Church Point	J. H. Saulnier	Aug. 8, 1878	200 00
Clarke's Cove	Roderick McDonald	Apr. 2, 1904	130 00
Coffin's Island	Chas. M. Firth	June 30, 1880	460 00

STATEMENT giving Names of Stations and Lightkeepers, &c.—*Continued.*

NOVA SCOTIA—*Continued.*

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Coldspring Head	L. Brownell.	March 27, 1901	150 00
Cole Harbour	Wm. M. Munro	April 23, 1907	70 00
Cole Harbour Range	Geo. C. Jamieson	Oct. 21, 1898	180 00
Country Harbour	Henry Burke	June 11, 1902	460 00
Cranberry Island Light and Fog alarm	James P. Hanlon	April 10, 1905	920 00
Creighton's Head	H. H. Creighton	May 6, 1874	240 00
Cross Island Light and Fog alarm	W. H. Wynacht	Aprll 13, 1893	920 00
Croucher's Island	Geo. Croucher	Jan. 31, 1883	345 00
Crotch	C. J. O. Hanley	May 6, 1906	200 00
Dartmouth	Wm. Patterson	June 3, 1903	130 00
Devil's Island	W. G. Fulker	May 3, 1886	490 00
Digby Pier Pole	Edwin Beaman	" 29, 1897	100 00
Dover Harbour	Edward Morash	Oct. 1, 1906	240 00
Duffus Point, inner	Alex. Fraser	Jan. 13, 1903	130 00
" outer	M. McLean	" 13, 1903	125 00
Economy Pole	Ingersoll L. McLellan	May 16, 1899	60 00
Egg Island	Jos. B. Stoddard	" 6, 1907	555 00
Eddy Point	Edward Mundell	July 28, 1903	485 00
Fish Island, Tusket River	Sévérin LeBlanc	" 1, 1899	295 00
Flint Island	Michael Brean	Aug. 20, 1904	460 00
Fourche Head, Light	Albert Hooper	May 18, 1908	150 00
Fort Point	J. E. Misener	" 16, 1896	205 00
Freestone Island	Michael Sampson	" 11, 1907	180 00
Fisherman's Harbour	Théodore Beiswanger	Dec. 8, 1905	180 00
Gabarouse	Jas. McDonald	Nov. 22, 1890	180 00
Gilbert Point	Jos. W. Melanson	Aug. 18, 1894	300 00
George's Island Light and Fog Bell	Robt. Ross	Jan. 18, 1876	320 00
Gillies Point	Hector McLean (M's. son)	Dec. 18, 1897	180 00
Glasgow Point	Abram Clory	July 25, 1894	180 00
Grandique	Daniel Clough	July 4, 1884	75 00
Grandique	D. A. Kaulback		60 00
Grand Etang	Sévérin B. LeBlanc	Mar. 25, 1905	75 00
Grand Passage, Briar Island	Chas. Buckmen	Jan. 7, 1901	295 00
Green Cove	A. J. Sallow	Dec. 28, 1900	205 00
Granville Centre	Henry Rooney	Feb. 24, 1904	90 00
Green Island	Wm. A. Duann	May 12, 1903	530 00
Gull Rock	L. D. Orchard	Jan. 1, 1877	485 00
Guyon Island	James W. Hardy	" 30, 1903	490 00
Glace Bay Range	Michael McNeil	Nov. 19, 1907	75 00
" "	Angus McFarlane	" 19, 1907	90 00
Guysboro	Moses C. Scott	April 19, 1884	300 00
Harbour au Bouche	Capt. Patrick Webb	Feb. 19, 1896	295 00
Hawke Island	Bartholomew Boudrot	Dec. 7, 1904	265 00
Herring Cove	Wm. Brackett	Aug. 28, 1897	130 00
Henry Island	D. A. McLennan	" 1, 1907	460 00
Highland Village	W. A. Hennessy	May 6, 1905	60 00
Hobson's Island	John D. Smeltzer	April 10, 1900	345 00
Horton Bluff	Mrs. S. M. Rathburn	Sept. 3, 1879	295 00
Hubbards Cove	Albert S. Coolin	Oct. 31, 1903	295 00
Harbour Island	Chas. G. Hodgson	June 16, 1908	330 00
Indian Harbour	Henry Boutilier	" 6, 1901	180 00
Ingonish	Robt. F. Warren	Sept. 17, 1903	400 00
" Harbour	Matthew Hawley	May 13, 1897	170 00
Ironbound Island	Howard M. Wolf	June 22, 1895	355 00
Isaac's Harbour	Ira L. Griffin	April 28, 1894	265 00
Isle au Haute	Percy E. Morris	Aug. 2, 1904	530 00
Iona	F. X. S. McNeil	Nov. 16, 1901	130 00
Jeddore Rock	John W. Mitchell	Sept. 29, 1882	460 00
Jeddore Harbour Range	Jeremiah Harpell, jr	Jan. 21, 1901	240 00
Jerome Point	Kenneth McAskill	July 30, 1901	320 00
Jerseyman's Island	Alphonse Thériault	" 1, 1905	370 00
Jordan Bay	John Frederick	Dec. 19, 1906	130 00
Kidstone's Island	Donald McRae	May 17, 1892	240 00

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of Canada.

NOVA SCOTIA—*Continued.*

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Kingsport	C. H. Huntley	June 30, 1890	100 00
Ketch Harbour	Chas. Martin	May 19, 1905	95 00
Lahave	W. H. Palmer	" 22, 1878	240 00
Lingan Head	John Walsh	July 4, 1904	240 00
Liscomb	James S. Henlow	Jan. 2, 1908	370 00
Little Dyke	S. Stewart	May 1, 1906	60 00
Little Hope	Capt. Almon Doggett	Oct. 22, 1901	680 00
Little Loraine, Harbour	Patrick Gallant	Jan. 19, 1900	120 00
Little Narrows	Alex. W. Ross	May 23, 1902	150 00
Louisbourg	Philip Price	Nov. 8, 1897	350 00
Louisbourg Harbour Range	Thomas Connington	Oct. 6, 1897	240 00
Louisbourg Fog Alarm	D. A. Campbell	March 20, 1902	920 00
Low Point	John C. Peters	Oct. 1, 1865	460 00
Low Point Fog Alarm	Thos. O'Neil	May 2, 1904	500 00
Mabou Outer	E. Doyle	June 14, 1897	80 00
" Inner	Roderick McLean	Dec. 7, 1906	70 00
Main à Dieu	John Pope	Sept. 11, 1902	370 00
Margaree	John A. McRae	Feb. 28, 1907	460 00
Margaree, Harbour Inner	R. McLellan	June 8, 1901	70 00
" Outer	Miles A. Dunn	May 12, 1903	70 00
Margaret's Bay	M. B. Pearl	Sept. 1, 1908	510 00
Margaretsville	Mrs. Ruth Early	Feb. 19, 1887	240 00
Marie Joseph	David Turner	Jan. 6, 1905	285 00
Marjories, Island	Norman McDonald	July 4, 1884	130 00
Masstown Pole	G. W. Vance	June 29, 1898	60 00
Mauger's Beach Light and Front Light	Wm. Iceton, sen	July 6, 1903	800 00
Meteghan	L. C. Comeau	Oct. 12, 1875	130 00
Mitcheners Point	William Currie		150 00
Moser's Island	Samuel Moser	Nov. 6, 1885	360 00
Mullin's Point	James Mullins	June 8, 1892	240 00
Munro Point	Malcolm Buchanan	Oct. 25, 1905	150 00
McKenzie's Point	Hector McRae	Aug. 20, 1890	180 00
Musquodoboit Harbour Range 'B'	John Kent	Apr. 29, 1904	100 00
	Fred. Kent, assistant	Mar. 11, 1908	50 00
" " 'F'	Jeremiah Kent	Apr. 29, 1904	125 00
McNeil's Beach	Lauchlin McNeil	Aug. 6, 1884	75 00
McMillan's Point	John B. Chisholm	Dec. 2, 1905	205 00
McNab's Island	Mathew Lynch	June 23, 1905	360 00
Negro Harbour Range	Levi Perry	" 17, 1899	250 00
Negro Island	Byron Nickerson	July 26, 1897	370 00
Neil Harbour	A. A. Buchanan	Aug. 14, 1899	180 00
North Canso	Robie McKay	Feb. 4, 1882	360 00
Noel	Geo. C. Davidson	Apr. 25, 1906	112 50
Ouitique Island	Fred. A. Burke	Feb. 16, 1907	420 00
Page Island	Alfred M. Powell	Dec. 5, 1905	265 00
Parrsboro'	William Pettis	" 6, 1888	400 00
Pease Island	Thos. Baker	May 19, 1879	420 00
Peggy's Point	Sydney H. Garrison	Dec. 22, 1902	395 00
Pennant	P. A. Gray	June 30, 1903	130 00
Petite de Grat	E. Landry	Feb. 23, 1897	240 00
Pictou Bar	Wm. Munro	Nov. 22, 1890	460 00
Pictou Custom House	Chas. Bone	June 14, 1907	100 00
Pictou Island	Andrew McFarlane	" 8, 1892	460 00
Pictou Island Pier, West end	Chas. D. Patterson	Mar. 29, 1905	460 00
"	Hugh McLean	June 24, 1905	100 00
Pictou Harbour Range	David Lowden	July 12, 1897	210 00
Piper's Cove	John C. McNeil	Dec. 18, 1897	150 00
Pointe Aconi	John Charles Bonner	Nov. 6, 1903	240 00
Point Edward Front	J. B. Rudderham	Jan. 15, 1905	295 00
" Back	A. J. Lewis	May 22, 1905	180 00
Pointe Prim Light, Fog Alarm, Digby	W. E. Ellis	Mar. 8, 1875	920 00
Pointe Tupper	Duncan Gillis	Apr. 1, 1906	345 00
Pomquette Island	M. Murphy	Dec. 18, 1890	395 00

STATEMENT giving Names of Stations and Lightkeepers, &c.—*Continued.*

NOVA SCOTIA—*Concluded.*

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Port au Pique	Sam Creelman	May 2, 1901	60 00
Port Bickerton	Theodore O'Hara	Jan. 26, 1901	205 00
Port Felix	W. C. Boudrot	July 16, 1902	295 00
Port George	Geo. M. Foster	Nov. 19, 1897	130 00
Port Greville Range	Ernest A. Hatfield	June 29, 1908	225 00
Pope's Harbour	Jas. Bollong	Aug. 6, 1877	345 00
Port Hood	J. Allan McDonald	May 10, 1890	300 00
Port Hubert	Watson Burgess	July 26, 1892	180 00
Port Mouton	J. Oscar Campbell	April 29, 1898	370 00
Port Medway	Kenneth D. Foster	Oct. 13, 1892	300 00
Port Medway Harbour	Samuel T. Foster	Feb. 17, 1899	100 00
Port Lorne	George D. Corbett	May 31, 1904	300 00
Port Wade	Chas. Slocum	Feb. 1909	50 00
Pubnico	Geo. D. Amero	Feb. 6, 1893	355 00
Pugwash	Murdock McLeod	Dec. 10, 1897	345 00
Queensport	W. E. Ehler	Aug. 13, 1906	345 00
Quaker's Islands	Wm. A. Mitchell	Feb. 19, 1896	245 00
Red Island	John P. Campbell	Nov. 30, 1901	130 00
*Sable Island Humane Station	R. J. Boutillier, supt.		700 00
St. Ann's	Alex. Nicholson	June 5, 1905	170 00
†St. Paul's Island	John M. Campbell, supt.		700 00
St. Esprit	Alex. W. Finlayson	April 12, 1905	490 00
St. Paul's Island, West Point	John McKenzie		400 00
St. Paul's Island Fog Alarm	M. J. McLeod	July 10, 1906	500 00
St. Paul's Island, N. E. Point	John Rose		400 00
Salter's Head	Callo Smith	June 21, 1888	75 00
Sambro Light and Fog Alarm	Alfred Gilkie	Jan. 8, 1867	800 00
Sambro Harbour Light	John H. Findlay	Dec. 7, 1899	130 00
Sambro Inner Island Light	Ephraim Smith	Jan. 3, 1900	130 00
Scattarie Light and Fog Alarm	John T. Martell	July 30, 1897	1,200 00
Seal Island Light and Fog Alarm	John Crowell	Oct. 14, 1899	920 00
Seal Island	Simon Joyce	July 4, 1884	180 00
Shafner's Point	Jacob V. Roblee	May 29, 1897	180 00
Sheet Rock	D. A. McCarthy	Jan. 1, 1906	530 00
Sheet Harbour Passage	James Wambolt	May 11, 1887	70 00
Sand Spit (Shelburne Harbour)	Jas. G. Stephens	Mar. 11, 1903	325 00
Ship Harbour	Howard Palmer		295 00
Shule Harbour	Capt. Clifford Patterson	Oct. 26, 1905	200 00
Sissiboo	Jas. Amiroult	July 11, 1899	240 00
S. E. Beaver Island	Theodore Sampson	Oct. 13, 1892	95 00
Spencer's Island	Baxter McLellan	July 21, 1904	130 00
Spencer's Point	R. A. Spencer	April 1, 1870	130 00
Stoddart's Harbour	Ephraim Larkin	Mar. 18, 1806	265 00
Sydney Bar	George Nunn	June 20, 1872	345 00
Terrence Bay	Samuel P. Slaunwhite	Oct. 13, 1903	130 00
Three Top Island	W. L. Munroe	" 28, 1879	360 00
Tor Bay	Jas. M. Webber	May 10, 1898	345 00
Troop Point	Ralph Troop	Jan. 23, 1906	130 00
Victoria Beach	James Hinds	Mar. 7, 1901	130 00
Wallace Harbour	George Boyle	July 13, 1903	180 00
Walton Harbour	Lewis E. Burgess	" 13, 1903	180 00
Wedge Island	Wm. R. Church	Mar. 27, 1907	515 00
West Head Barrington	Wm. B. Smith, jun	April 12, 1890	240 00
West Arichat Range, Front Station	Edward Delory	Sept. 1, 1904	100 00
" " Back Station	Michael Gernor	" 1, 1904	100 00
Westhaver's Island	Alfred Strum	" 25, 1888	240 00
Westport	E. W. Suthern	April 12, 1890	420 00
Whitehead	Capt. Jas. Wells	Oct. 20, 1897	555 00
Whycocomah	Murdock Matheson	Sept. 11, 1884	75 00
Wood's Harbour	Jas. E. Goodwin	Aug. 27, 1900	265 00
Wolfville	J. L. Franklin	April 4, 1902	130 00
Wolf Point	Howard Palmer	Oct. 14, 1899	250 00
Yarmouth Harbour (see Bunker Island)			

*With board for self, family and assistants and allowance for salaries of staff. † With 5 boatmen at $32 per month.

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STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada.—*Continued.*

NEW BRUNSWICK.

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Anderson's Hollow Light	Aron B. Copp	Mar. 30, 1903	130 00
Beaver Harbour	J. Melvin Eldridge	May 2, 1904	320 00
Beacon (St. John Harbour)	Wilson Gregg	Nov. 4, 1901	445 00
Bliss Island	James H. McLeod	Oct. 17, 1900	465 00
Bathurst	Geo. C. Sutherland	Mar. 20, 1882	240 00
Belyea's Point	Mrs. Westfield A. Day	Nov. 21, 1906	100 00
Baie du Vin	James Chapman	July 24, 1882	240 00
Buctouche Beacon	H. B. Robicheaud	June 21, 1884	180 00
" Bar	Jadus P. Cormier	July 26, 1902	240 00
Big Duck Island Fog Alarm	Rupert Burnham	June 25, 1906	670 00
Bridge's Point Light	Robert Upton	Sept. 11, 1899	95 00
Belle Isle (Hatfield's Landing)	Thos. W. Spragg	June 27, 1903	95 00
Bellony Point	Edward H. Egan	May 17, 1902	140 00
Black Lands Gully	Urbain Daigle	" 28, 1903	130 00
Cape Enrage Fog Alarm and Light	James G. Barbour	" 11, 1888	800 00
Cape Jourimain	A. J. P. Bent	Jan. 26, 1901	345 00
Cape Tormentine	J. R. Barry	Mar. 26, 1906	150 00
Caraquet	G. Laintaigne	June 16, 1888	240 00
" Lower Light	Frederic F. Doucet, jr	Oct. 14, 1903	70 00
" " "	Patrice L. Legere	" 14, 1903	70 00
Cox's Point	Alexander McBain	May 26, 1898	95 00
Cassie's Point	Charles LeBlanc	" 4, 1872	320 00
Cape Spencer, Alarm	Fred. G. Blacklock	Mar. 3, 1888	460 00
Cherry Island	Harry Chaffey	Oct. 14, 1903	205 00
Cocagne Range	Dominique Gognen	" 14, 1907	150 00
Church Point (Buctouche)	D. O. Maillett	July 7, 1883	180 00
Dalhousie	James Arseneau	June 18, 1894	130 00
Dipper Harbour	Fenwick Belmore	Mar. 12, 1895	155 00
Douglas Island and P.W. Montgomery's Isld.	Henry McNeil	Jan. 1, 1880	295 00
East Hd. Musquash	Chas. P. Hamm	" 14, 1879	345 00
Escuminac Alarm and Light	Kenneth R. McLennan	Mar. 7, 1892	880 00
Fox Island, Upper, Light	Seymour Williston	June 4, 1902	300 00
" Lower "	George Mills	" 23, 1897	240 00
Fanjoy's Point	William Fanjoy	Dec. 15, 1897	95 00
Flewelling's Wharf	Mary Flewelling	April 12, 1890	95 00
Fort Folly	Amos. P. Belliveau	June 23, 1903	265 00
Gagetown	Fraser Fox	April 22, 1904	95 00
Grindstone Island Alarm	James R. Russell	Jan. 13, 1899	800 00
Gannet Rock Alarm	Coleman Dalzell	July 1, 1904	1,100 00
Green Head	Thos. E. Looney	July 14, 1886	200 00
Grant's Beach	John Delaney	Oct. 7, 1880	150 00
Gull Cove	Lewis Frankland	Nov. 14, 1902	100 00
Goose Lake	John D. Brune	May 11, 1888	295 00
Grand Harbour	Lloyd C Dakin	" 2, 1904	485 00
Grand Manan, Fog Alarm	George T. Tatton	Oct. 16, 1866	800 00
Gray's Landing	B. F. McCutcheon	Mar. 6, 1907	80 00
Head Harbour Light and Fog Alarm	Chas. D. Hyliard	June 29, 1904	800 00
Heron Island	John A. D. Robertson	April 1, 1902	240 00
Hendry's Point, Washademoak Light	Miss A. M. Hendry	Mar. 15, 1899	95 00
Hay Island	Joseph Allain	May 21, 1895	180 00
Harper's Point	Lawrence Blakley	Sept. 9, 1887	90 00
Hampstead	Edgar B. Palmer	Nov. 6, 1900	95 00
Indian Point	John De Grace	June 4, 1889	180 00
Jemseg	Geo. F. Nevers	Nov. 24 1884	95 00
Kouchibouguac	Henry Gagnon	June 26, 1908	180 00
Letete Fog Alarm and Light	Sydney Dines	Mar. 27, 1907	640 00
Light Ship (Miramichi)	Capt. Robt. McLean	April 12, 1902	825 00
Little Belledune (Miscou Gully)	J. A. Roberty	Feb. 21, 1905	295 00
Little Shippegan	Robt. McConnell, jr	Sept. 9, 1887	130 00
Long Point Bellisle Light	James A. Bates	June 1, 1907	95 00
Machias Seal Island Light and Fog Alarm	W. L. Harvey	July 8, 1904	1,150 00
Midgic Bluff Light	Arthur Henderson	Oct. 4, 1894	200 00

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada.—*Continued.*

NEW BRUNSWICK—*Continued.*

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Miscou	Joseph L. Robichaud	Nov. 11, 1902	800 00
Miramichi Draw Bridge	Edward Sinclair, Company		
Musquash	R. P. McDonald	Jan. 28, 1901	145 00
Middle Island	Michael Murray	April 10, 1902	240 00
Mark's Point	Wm. Maloney	Nov. 7, 1903	150 00
McMann's Point	Harvey R. McMann	Jan 2, 1901	95 00
Mulholland's Point	Alvin Parker	June 13, 1901	200 00
Neguac	John Robinson	" 30, 1895	200 00
Neguac Range	Chas. McIntosh	Dec. 10, 1892	130 00
Negro Head Submarine Bell	Alfred Splane		250 00
Negro Town Point	E. Ross	Mar. 5, 1878	460 00
Newcastle	Blackstock Matheson	April 18, 1898	100 00
Oak Point, St. John River Light	Mrs. Bessie May Francombe	Dec. 20, 1907	95 00
Oromocto Shoals Light	R. Brennan	Mar. 18, 1903	120 00
Oak Point (Miramichi) Light	John Bowie	June 2, 1906	130 00
Partridge Island Light and Fog Alarm	Hugh Andrews	May 1, 1906	1,200 00
Pokemouche Light	Michael Hayden	Oct. 17, 1888	300 00
Portage Island	Peter Morrison, Jr	May 17, 1892	325 00
Pt. Lepreaux	Robert L. Belding	June 30, 1905	450 00
Pt. Lepreaux Fog Alarm	Frank Frauley	" 30, 1905	900 00
Pea Point Light	Elias C. Dickson	Nov. 16, 1898	320 00
Passamaquoddy Bay Light, West	Joseph Kilpatrick	Feb. 3, 1898	485 00
" " East	Theobald Rooney	Jan. 1, 1896	395 00
Preston's Beach	Stanislaus Preston	July 11, 1889	150 00
Petit Rocher	J. B. Boudreau	Feb. 26, 1896	180 00
Peck's Point L. and F.A	Edwin Lockhart	Oct. 20, 1903	490 00
Poquesuide Light	Octave Hachey	July 12, 1881	250 00
Palmer's Point	Robert E. Pickett	May 11, 1897	95 00
Pointe Brulee	Frank Gould	Jan. 13, 1899	80 00
Ponite du Chene	Thomas Harts	Feb. 17, 1905	95 00
Pointe Spain	Victor Daigle	May 28, 1903	60 00
Perry's Point	John Carney	Sept. 25, 1900	95 00
Quaco	Charles Brown	Nov. 25, 1884	400 00
" Breakwater	Fred M. Cochran	Mar. 25, 1892	155 00
" Fog Alarm	L. B. Bradshaw	Aug. 2, 1887	400 00
Robertson's Point	Chas. W. Robertson	June 30, 1897	95 00
Richibucto	Peter F. Richard	May 30, 1895	230 00
" Beacon	Jude Robichaud	June 16, 1902	200 00
" Bar	Joseph F. Richard	June 16, 1902	180 00
** " N., Beach	Thos. McNeil		150 00
Reid's Point	Henry A. Wheaton	Nov. 15, 1908	80 00
Railway Wharf, Moffat's Ledge	Geo. Cumming	Jan. 1, 1880	130 00
South Tracadie	Wm. C. Ferguson	Mar. 23, 1898	180 00
Swallow Tail	Geo. Y. Dalzell	Mar. 18, 1893	485 00
St. Andrew's	W. J. Pendlebury	April 10, 1889	320 00
Spruce Point	Bertie G. Hannah	Sept. 15, 1892	150 00
Sand Point	Richard Wagner	June 7, 1883	95 00
Shediac	M. Robinson	Dec. 29, 1873	295 00
Southern Wolf	Ethelbert Wright	Mar. 6, 1906	555 00
Shippigan	Adelard Savoie	April 2, 1906	350 00
Sheldrake Island	Duncan Morrison	Feb. 25, 1880	300 00
Scuth West Head	Clyde S. Ingersoll	July 10, 1907	555 00
Stonehaven	Mrs. Elizabeth Scott	July 8, 1904	130 00
The Cedars	Forrest Williams	May 11, 1897	95 00
Tracadie	Fabien D. Basque	Aug. 20, 1904	300 00
Tiner's Point Fog Alarm	Alfred Splane	Aug. 21, 1905	800 00
Wilmot's Bluff	J. H. True	Sept. 12, 1899	95 00
Washademoak Lake	See Hendry's Farm		

** Died February 9, 1909.

BETWEEN MONTREAL AND QUEBEC AND BELOW QUEBEC.

Algernon Rock	Geo. Leclerc	July 30, 1901	700 00
Amherst Island	Wm. Cormier	April 26, 1871	395 00
Anticosti, east point	Christopher Hubert	July 27, 1907	760 00
Anse St. Jean	F. Lavoie	Mar. 13, 1889	60 00
Ans à l'Eau	Aug. Gingras		60 00

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STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada.—*Continued.*

BETWEEN MONTREAL AND QUEBEC AND BELOW QUEBEC.—*Continued.*

Name of Station.	Name of Lightkeeper.	Appointed.	Salary
			$ cts.
Anticosti, south point	Emile Laprise	April 18, 1903	920 00
" south-west point	Z. Lemieux	July 10, 1900	700 00
" west point	Alf. Malouin	July 1, 1877	850 00
Ash and Bloody Islands, Range	Jas. Alex. McGee	May 26, 1903	240 00
*Barachois de Malbaie	F. X. Lemieux	Mar. 6, 1903	75 00
Barre à Boulard	Nap. Daigle	May 28, 1904	240 00
" "	Phileas Abel	June 23, 1903	95 00
Batiscan "F"	L. Fugère	April 29, 1868	95 00
" "B"	Jos. L. Brunelle	April 27, 1905	95 00
Becancour "F"	Omer Gingras	Oct. 24, 1905	180 00
" "B"	A. Tourigny	Oct. 24, 1905	130 00
Bellechasse	Jos. Bilodeau	June 15, 1903	400 00
Belle Isle	Jean Louis Thibadeau	Oct. 25, 1907	1,600 00
" north-east point	Paul Thomas	July 8, 1904	1,350 00
Belle River Park	Chas. Roy	Aug. 5, 1904	200 00
Bersimis	Henri Grenier	Aug. 8, 1903	130 00
Bicquette	Louis Pinault	Oct. 6, 1900	800 00
Bird Rocks	W. Bourque	Nov. 15, 1905	1,350 00
Boucherville	Hiliodore Carrière	Aug. 26, 1903	95 00
Brandy Pots	Alphonse Richard	Oct. 7, 1878	460 00
Bryon Island	Procule Chevrier	June 23, 1905	460 00
Cap aux Corbeaux	Edward Coudé	Oct. 26, 1905	80 00
Cap au Saumon	Louis Bouchard	May 16, 1896	760 00
Cap aux Oies	Capt. Thos. Tremblay	May 1, 1888	295 00
Cap Bauld	Edmond Fontaine	Sept. 1, 1905	920 00
Cap Charles "B"	Amédée Baron	June 26, 1901	100 00
" "F"	Alcide Boisvert	July 26, 1901	95 00
Cap Chatte	Luc Coté	Dec. 3, 1901	670 00
*Cap Despair	Charles Bourget	Nov. 1, 1897	460 00
Cap Gaspé	Frs. Le Huquet	Oct. 22, 1896	700 00
Cap Madeleine "B"	J. F. Sasseville	June 9, 1886	800 00
" (A) "F"	Moïse Hébert	May 11, 1888	95 00
" (A) "B"	G. Vaillancourt	Oct. 1, 1906	130 00
" "F"	Pierre Toupin	April 26, 1905	95 00
" Upper Lts. B	Elzéar Beaumier	Oct. 1, 1905	130 00
" Village Range	Ernest Lacourse	Mar. 13, 1906	200 00
Cap Anguille	Alfred Petry		1,150 00
Cap Norman	J. W. Campbell	April 12, 1890	880 00
Cap Ray	E. H. Rennie	Oct. 19, 1884	920 00
Cap Rosier	Eug. Costin	Nov. 4, 1890	920 00
Carleton Point	Louis Bujoid	May 25, 1899	345 00
" Wharf	Francis Cullen	July 12, 1907	75 00
Champlain "B"	Louis Bertrand	Sept. 12, 1902	130 00
" "F"	Philippe L. Carignan	Oct. 1, 1902	95 00
Chambly Basin Range Lights	Jos. de Senneville	May 23, 1907	150 00
Chambly Canton Range Wharf	Joseph Savage	July 10, 1907	240 00
Chicoutimi, Lights—			
Chicoutimi Wharf	André Harvey	May 30, 1889	60 00
Riviere Caribou "B"	H. Simard	Mar. 1, 1905	70 00
" "F"	John Savard	Mar. 1, 1905	70 00
Riviere du Moulin "B"	Luce Gourdeau	May 9, 1905	70 00
" " "F"	George Tremblay	Sept. 19, 1899	70 00
Rivière Valin (Range)	Maximin Lavoie	Summer, 1893	120 00
Savard's Valin (Range)	Dorilas Savard	July 18, 1904	120 00
Poste St. Martin "F"	Alfred Pilote	April 22, 1907	70 00
" " "B"	Frs. Gauthier	April 22, 1907	70 00
Chlorydorme	Magloire Coulombe	Oct. 15, 1904	130 00
Contrecœur, Course "B"	Norbet Duval	April 22, 1904	130 00
" " "F"	Joseph Arpin	Sept. 12, 1902	100 00
" Traverse "B"	Alfred Lacroix	July 26, 1904	130 00
" " "F"	Joseph Alcidas Lacroix	April 14, 1004	90 00
" " St. Ours	J. B. Laporte,	April 26, 1904	150 00
" " " Traverse	Anasthase Gaudet	Oct. .. 1908	100 00
" Verchères "B"	Ernest Guyon	Nov. 11, 1904	150 00
" " "F"	Honoré Tétrault	Nov. 11, 1904	150 00
Crane Island	Désiré Vézina	April 25, 1904	360 00

** Died Feb. 9, 1909. * $25 extra for blowing fog-horn.

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of Canada.—*Continued.*

BETWEEN MONTREAL AND QUEBEC AND BELOW QUEBEC—*Continued.*

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ c.
Domaine F. Range	Edward Gerard	May 30, 1908	80 00
Domaine B. Range	Xavier Emond	" "	80 00
Duthies Pt	B. W. Willette	Oct. 16, 1903	90 00
Eboulements	Wilfrid Bouchard	April 25, 1906	65 00
Egg Island	Tancrède Pelletier	July 1, 1901	530 00
Entry Island	Geo. F. Cullins	*July 30, 1901	295 00
Etang du Nord	Nectaire Arsenau	July 21, 1891	395 00
Escoumains Range Lts	Saguenay Lumber Co.	Sept. 10, 1906	150 00
Fame Pt	Jas. Ascah	Sept. 2, 1880	1,200 00
Father Point	Jno. McWilliams	May 20, 1893	450 00
Father Pt. Fog Alarm	J. G. Blanchet	July 21, 1904	800 00
Flower Island	Jos. Lavallée	April 12, 1905	700 00
Forteau	Thos. Wyatt	Oct. 18, 1899	1,200 00
Fox River	André Samuel	Oct. 15, 1904	130 00
Gallia Bay Upper Range	Elz. Cantara	May 3, 1904	350 00
Gallia Bay Lower Range	Louis Peloquin	" "	350 00
Gascons Wharf	John Mourant	June 8, 1906	75 00
Gaspé Basin	William Lindsay	June 14, 1900	60 00
Gentilly "B"	Delphis Mailhot	April 2, 1907	150 00
Gentilly "F"	Adolphe Lebleu	April 6, 1907	250 00
Grande Entrée	Andre Turbide	" "	70 00
Grande Rivière	William Bisson	Oct. 22, 1896	150 00
Grand River Wharf	J. B. Couture		60 00
Grande Vallée	A. Fournier	April 14, 1900	130 00
Green Island	R. W. Lindsay	Sept. 28, 1888	700 00
Greenly Island	Map. Côté	Oct. 12, 1903	1,150 00
Griffons Cove	H. Boulet	June 29, 1908	130 00
Grondines "B"	Jos. Sauvageau	June 20, 1904	130 00
" "F"	Eugène Mayrand	" "	170 00
Grondines Pt. "B"	Emile Houde	" "	130 00
" "F"	Achille Sauvageau	" "	295 00
Grosse Roche	Nazaire Morin	June 25, 1906	500 00
Guard Pier	Benj. Rodier	Sept. 10, 1907	500 00
Hochelaga "R"	Alphonse Chartier	Aug. 5, 1904	200 00
Hospital Rock	Victor Lavoie	April 1, 1909	240 00
Isle Ronde	Herman Chartrand	Aug. 1, 1907	500 00
Ile à la Bague	Louis Dubois	April 14, 1903	180 00
Ile à Aigle "B"	Eug. Savarie	May 1, 1903	130 00
Ile à Aigle "F"	F. X. Lapointe	" "	130 00
Ile aux Coudres	Eustache Boudreault	April 20, 1906	60 00
Ile des Barques	Omar Salvail	May 6, 1897	295 00
Ile de Grâce "B"	Louis Letendre	April 1, 1906	130 00
" "F"	Ed. Paul	Sept. 7, 1871	240 00
Ile du Pads Range	Zotique Courscheine	Aug. 8, 1907	300 00
Ile du Moine "B"	Paul Mongeau	Dec. 27, 1906	150 00
" "F"	Etienne Provencal	Dec. 27, 1906	130 00
Ile aux Raisins Range	Louis Boucher	April 13, 1898	285 00
Ile Bouchard	F. Ivan Laporte		150 00
Ile Bouchard	Alphonse Chicoine	June 16, 1903	95 00
Ile Deslauriers	Nap. Langevin	Dec. 18, 1906	150 00
Ile Ste. Thérèse (Upper Range)	Sam Reeves	Oct. 12, 1870	300 00
Ile Ste. Thérèse (Lower Range)	Jos. Malo	Feb. 1, 1897	150 00
Ile des Lauriers "B"	P. Choquet	March 13, 1908	95 00
Ile au Bélier Lac St. Jean	Wm. Gaudreault	Oct. 30, 1901	100 00
Kamouraska	Arthur Levesque	Feb. 19, 1901	460 00
Lacolle	W. G. Whitman	Jan. 18, 1904	150 00
Louisville Range Lts	Onésime Plante	June 23, 1907	150 00
Longue Pointe Traverse "R"	James Fletcher	May 16, 1904	150 00
Lake Memphremagog.			
Black Pt	Jas. P. H. Peters	June 1, 1891	60 00
Lead Mines	W. Wheeler	" "	60 00
Molsons Island	Miss E. Molson		80 00
Georgeville	C. E. Martel	May 19, 1905	60 00
Wadleigh Pt	J. A. Patterson	June 1, 1891	60 00
Witch Rock	D. E. Peters		140 00

*** $25 extra for blowing fog horn.

SESSIONAL PAPER No. 21

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada.—*Continued.*

BETWEEN MONTREAL AND QUEBEC AND BELOW QUEBEC—*Continued.*

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Lavaltrie (Range)	Denis Giguère	May 24, 1870	300 00
Lake St. Peter Lt. Ship No. 1	Desiré Laflèche	April 12, 1887	510 00
" " " 2	Hector Fiset	April 22, 1875	530 00
" " " 3	J. B. Weaner	May 9, 1904	490 00
L'Islet Richelieu	Jos. Auger	Jan. 20, 1905	150 00
Lotbinière "B"	George Beaudet	Jan. 4, 1883	95 00
" "F"	Mrs. L. Beaudet	Sept. 3, 1903	95 00
Magpie "R"	Albert Dupuis	Sept. 14, 1907	120 00
Maquereau Point	A. Bertrand	Dec. 21, 1877	**345 00
Martin River	Aug. Leclerc	Sept. 3, 1902	920 00
Matane	Jos. Banville	Feb. 1, 1897	370 00
Metis	Elisée Caron	Mar. 28, 1906	345 00
Montée du Lac (Range)	W. Labranche	May 2, 1905	460 00
Mont Louis	Ls. Létourneau	" 22, 1906	130 00
Montmagny	Cap. H. Boulanger	April 13, 1878	95 00
*Murray Bay			
Natashquan	Elie Landry	July 28, 1906	250 00
Newport	Solomon Grenier	June 3, 1897	150 00
Nicolet Range "B"	Edmond Héroux	Dec. 5, 1906	130 00
" "F"	Didier Héroux	" 5, 1906	210 00
New Carlisle Wharf	John Chisholm		50 00
North Half Way Point (Range)	Jos. Lord	May 5, 1903	180 00
Oak Point	Thos. Harper	Jan. 1, 1907	130 00
Orleans Range—			
Ange Gardien "B"	Olivier Paré	Nov. 10, 1902	80 00
" "F"	F. Gagné	" 10, 1902	80 00
Ste. Famille "B"	Pierre Pâquet	Oct. 19, 1885	75 00
" "F"	Alfred Poulin	" 26, 1896	80 00
St. Pierre "B"	Honoré Roberge	" 19, 1885	75 00
" "F"	Olivier Vézina	" 28, 1897	80 00
**Paspebiac	John Loisel	Aug. 27, 1894	180 00
Percé	Florian Bourget	Mar. 18, 1893	200 00
Perroquet	Placide Vigneau	Sept. 19, 1892	625 00
Petite Traverse (Contrecœur) "B"	Ed. St. Laurent	April 22, 1904	130 00
" " "F"	Louis Caisse	" 22, 1904	100 00
Pilgrims	H. Morin	" 29, 1898	385 00
Plateau	Geo. St. Croix	Oct. 22, 1896	460 00
Platon (Range)	Chas. Beaulet	Aug. 24, 1894	150 00
Pte à Basile "B"	Antonio Demers	July 22, 1904	150 00
" "F"	Elzéar Douville	Feb. 6, 1904	150 00
Pointe à Garde Light-ship	Chas. Brown	June 26, 1904	370 00
" aux Citrouilles	Widow F. Marchand	July 3, 1906	240 00
" aux Orignaux	Dominique Levesque	Oct. 5, 1903	360 00
" Bleue	Armand Tessier	June 9, 1904	60 00
" des Monts	Victor Fafard	Aug. 1, 1899	700 00
" du Lac	Sylvis Paquin	May 2, 1900	130 00
" Echouerie	Pitre Bourdage	July 25, 1903	210 00
" Noire	J. E. Boulaine	Jan. 18, 1904	240 00
" Riche	N. Breton	May 16, 1896	530 00
" St. Jean	Ls. Lachance	Sept. 26, 1896	300 00
" St. Laurent	Joachim Godbout	April 15, 1904	300 00
**Port Daniel	F. X. Langlois	Feb. 22, 1907	75 00
" West	Arthur Horrie	Jan. 1, 1907	130 00
Portneuf (a) Range	Josephine Rodrique	Dec. —, 1900	295 00
" " below	Pierre Poitras	Oct. 16, 1904	130 00
" "	Edmond Tremblay	May 7, 1903	345 00
Point aux Esquimaux	Joseph F. Boudreault	Oct. 29, 1907	130 00
Port St. François (Range)	Frs. Manseau	Mar. 27, 1900	285 00

* Now lit by electricity. ** $25 extra for blowing fog-horn.

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of Canada.—*Continued.*

BETWEEN MONTREAL AND QUEBEC AND BELOW QUEBEC—*Continued.*

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Quebec Harbour	Harbour Commission		60 00
Red Island Lighthouse	P. T. Fraser	April 12, 1890	510 00
Repentigny "B"	L. L. Rivet	" 28, 1894	90 00
" "F"	J. Bte. Lachapelle	Feb. 1, 1861	90 00
Rimouski	Ubalde Lavoie	May 22, 1906	65 00
Rivière à la Pipe	Alex. Morin	Oct. 3, 1901	77 50
" du Chêne, Anglais Pt	Ant. Langlois	July 11, 1888	150 00
" du Loup	F. E. Gilbert	Sept. 22, 1902	80 00
" St. François	Phileas Desmarais	July 2, 1897	180 00
Roberval	Electric Light Co.	June 28, 1898	100 00
Sand Beach	Thomas Kennedy	Aug. 9, 1904	460 00
St. Alphonse	Pitre Tremblay	June 19, 1895	60 00
St. Antoine	Leonidas Frechette	March 4, 1902	95 00
"	Francois Doré	April 14, 1903	130 00
St. Siméon	Henry Savard	Oct. 25, 1906	60 00
Ste. Anne des Monts	X. Lafrançois	" 15, 1904	130 00
Ste. Anne de Sorel "F"	Frs. Lanceault	Mar. 28, 1906	100 00
" " "B"	Pierre Cournoyer	" 28, 1906	130 00
Ste. Croix	Willie A. Thurber	" 18, 1901	180 00
" Bar	Telesphore Corteau	" 28, 1901	80 00
Ste. Croix	Widow D. Racette	Dec. —, 1900	80 00
Ste. Emélie, Back Light	Emery Filteau	Mar. 16, 1905	95 00
" Front Light	A. Laliberte	Sept. 24, 1888	100 00
St. Francois, I.O. "F"	Jos. Lepage	April 20, 1876	90 00
" "B"	Ls. Marceau	" 1, 1884	90 00
St. Petronille, I.O	Nap. Ferland	Sept. 3, 1904	250 00
St. Pierre les Becquets	Henri Perreault	May 26, 1901	80 00
Ste. Felicité Fog Alarm	Frs. Belanger	Jan. 14, 1905	640 00
St. Valentin Range	Paul Martin	April 28, 1873	150 00
Seven Islands	Alfred Arcand	May 20, 1898	960 00
Ste. Anne Range "F"	Cezare Dufour	" 21, 1908	75 00
" " "B"	Alphonse Poulin	" 21, 1908	75 00
Sorel Harbour	R. & O. Nav. Co. Assistant	Sept. 6, 1854	**85 00
Trois Pistoles	Cyrille LeBel	Oct. 25, 1907	125 00
Three Rivers			
Upper Traverse Pier	Alfred Fournier	April 14, 1900	760 00
Upper Champlain Basin " B"	Louis Pothier	" 1, 1906	130 00
" " "F"	Joseph Massicotte	" 1, 1906	100 00
Varennes	Azarie Geoffrion	May , 1903	80 00
Verchères Traverse, "B"	Phileas Charbonneau	April 21, 1902	80 00
" " "F"	F. X. Chicoine	" 21, 1902	95 00
Verchères, Village, "B"	Felix Bourquet	" 21, 1902	80 00
" " "F"	Joseph Guyon	" 21, 1902	95 00

**Continued from "Trinity House." $120 per annum with $10 per annum increase to maximum of $160.

ABOVE MONTREAL.

Aylmer, P.Q	Francis Boucher	May 3, 1907	180 00
Arnprior Island (Lower)	William Kilroy	Oct. 1, 1905	180 00
Allumette Island (Lower)	John Manders	Aug 7, 1907	130 00
"	John Cox	June 22, 1887	130 00
Argenteuil Bay	Joseph Giroux		100 00
Bamford Island	Robert Bamford	" 21, 1888	320 00
Barriefield Common Range	William Murray	May 17, 1900	180 00
Baskin's Wharf	Silas Sullivan	Dec. 22, 1896	130 00
Battle Island	C. S. McKay	Aug. 27, 1877	555 00
Beauharnois	Alphonse Dault	April 14, 1903	260 00
Belleville	J. C. Weir	" 4, 1901	240 00
Blind River Range	W. H. McGauley	" 28, 1908	60 00
Boyd Island (see Spanish River)			
Bois Blanc	Agnes Hackett	June 22, 1901	460 00

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Domoinion of of Canada—*Continued.*

ABOVE MONTREAL—*Continued.*

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Black Bear Island	Daniel Matheson	June 22, 1899	270 00
Blind River Wharf, Ltd	The Eddie Co		60 00
Brown's or Knapp's Pt	Jos. J. Brophy	May 9, 1905	205 00
Bishop's Bay Range	F. Cutler	July 20, 1908	150 00
Bretbeuf Range	W. Baxter	May 23, 1885	400 00
Brighton Range	H. V. Simpson		540 00
Bronte	Chas. Osborne	Oct. 20, 1906	250 00
Buckoin's Point	Godfrey Ouillet	Feb. 23, 1884	200 00
Burlington Beach	Thomas Lundy	May 2, 1905	485 00
Byng Inlet & Gircaux Island	Louis Lamondin	July 20, 1901	425 00
Cabot Head	Charles Webster	May 10, 1898	880 00
Campbell Island	Robert Wilson	Jan. 8, 1905	180 00
Caribou Island	Antoine Boucher	May 3, 1907	1,150 00
Cape Robert	N. Matheson	Oct. 2, 1896	360 00
Cape Croker	R. Chapman	Nov. 13, 1902	1,050 00
Caron Point	Honore Sauvé	May 1, 1889	75 00
Cox Reef, Man	Wm. Doré	Jan. 11, 1908	385 00
Cecebe Lake	John Schade	Aug. 29, 1906	250 00
Centre Brothers Island	D. Wemp	Jan. 9, 1901	240 00
Chantry Island	Malcolm McIver	April 1, 1907	530 00
Cherry Island	I. S. Johnson	Nov, 5, 1883	300 00
Christian Island	Allan Collins	Mar. 25, 1891	485 00
Clapperton Island	Henry F. Baker	Dec. 2, 1895	385 00
Cobourg	Robert Gorden	May 16, 1883	225 00
Colchester Reef	John Manson	May 1, 1888	850 00
Cole's Shoal	R. P. Boyd	April 9, 1884	295 00
Collingwood	Jas. W. Lunan	Jan. 2, 1904	420 00
Coppermine Point	J. J. Rosseau	June 27, 1904	130 00
Corby Point	Joseph Davieau	May 27, 1890	385 00
Cornwall Canal and Hamilton Range	Remi Casgrain	April 1, 1906	300 00
Corunna	W. J. Scott	" 23, 1901	150 00
Coteau Landing	Thos. Filiatreault	May 27, 1890	150 00
Coulonge Lake	Felix Bertrand	April 2, 1892	130 00
Cove Island	Kenneth McLeod		880 00
Darlington	Port Darling Har. Co	1886	100 00
Deep River Island	Jos. Beauchamp	1908	130 00
Deseronto	Rathbun Company	Oct. 14, 1884	200 00
Dorval and St. Claire	Benjamin Cloude	Aug. 1, 1907	400 00
False Ducks	Darland Dulmage	May 19, 1903	800 00
Ferris Island	Jonathan Morrison	March 1, 1908	240 00
Flower Pot Island	John Parker	" 3, 1907	300 00
Fort William, Upper Ottawa	Jas. McCool, sr	May 23, 1887	90 00
Frenchman's Bay	Wm. O'Brien	April 14, 1904	150 00
French River and Bustard R.	Mrs. E. B. Borron	Jan. 20, 1903	555 00
Fox Island, Lake Simcoe	John Prosser	Sept. 14, 1896	250 00
Gananoque Narrows and Jackstraw Shoal	Mrs. Manly Cross	Jan. 2, 1908	550 00
Gargantua	Louis Miron	Oct. 26, 1899	485 00
Giant's Tomb	A. H. Griffith	Sept. 17, 1898	300 00
Gibraltar Point	P. J. McSherry	May 2, 1905	400 00
Goderich	Robert Campbell	June 9, 1886	460 00
Gore Bay	Angus Matheson	July 10, 1903	385 00
Gravenhurst	Isaac Barnes	Mar. 20, 1906	130 00
Graham Front	W. Graham	Dec. 19, 1904	75 00
" Back	X. Sicard	April 29, 1905	75 00
Great Duck Island	John Purvis	May 9, 1898	880 00
Green Shoal	Alberte Laberge	" 20, 1902	200 00
Grenadier Island	Albert Root	Dec. 15, 1863	180 00
Griffith Island	W. T. Boyd	May 14, 1889	485 00
Grosse Point	William Shannon	Sept. 27, 1866	460 00
Gull Island	James Roddick	" 7, 1907	530 00
Gull Harbour	Thor. Fjeldstedt	May 6, 1904	180 00
George's Island (Lake Winnipeg)	Chas. T. Whiteway	June 16, 1906	400 00
Hope Island	Charles Vallée	April 20, 1899	450 00

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada—*Continued.*

ABOVE MONTREAL—*Continued.*

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Isle Perrot	Ank. McNabb	May 20, 1905	130 00
Jackfish Bay	Ben. Almos	Oct. 1, 1907	50 00
Jones Island, Georgian Bay	Ed. Taylor	June 3, 1901	800 00
" Range, Ottawa River	John Paquette	April 13, 1893	100 00
Kagawong	W. M. Boyd		80 00
Kaministikwa	John Armstrong	April 28, 1894	300 00
Killarney	Frank Roque	Feb. 28, 1905	400 00
Kincardine	Thos. McGaw, jr	June 13, 1889	460 00
Kingsville	W. H. Black	July 27, 1902	180 00
Kitchener Island	P. J. Sullivan	Oct. 25, 1907	400 00
Lamb Island	Andrew Alexander	April 26, 1897	555 00
Lancaster Bar and Pier	J. J. Munroe	June 8, 1892	425 00
Leamington	F. H. C. Conover	April 28, 1883	180 00
Lime Kiln Crossing	Stephen Pettypiece	May 11, 1888	350 00
Lion's Head	Charles Knapp	Oct. 28, 1903	75 00
Little Current	David Boyter	April 22, 1903	360 00
Little Gross Cap	W. T. Richardson	Sept. 27, 1900	200 00
Lonely Island	Jean Haitse	May 11, 1885	725 00
Long Point, east end	S. B. Cook	June 9, 1897	800 00
" west end	F. E. Mason	" 3, 1901	460 00
L'Orignal	Gregoire Seguin	May 8, 1894	130 00
Lower Narrows	J. B. Leblanc	Jan. 4, 1904	130 00
Lyal Island	John McKay	Oct. 27, 1884	510 00
Manitowaning	John Gourley, jr	July 3, 1900	150 00
Meaford	Samuel Dutcher	May 7, 1877	200 00
Michipicoten Island	Hyacinthe Davieau	July 1, 1881	460 00
Michipicoten Harbour	W. T. Richardson	Sept. 27, 1900	270 00
Middle Island	John L. Lidwell	July 10, 1889	395 00
Midland Range	Nap. Somers	June 19, 1900	240 00
Mississagi Strait	J. H. Ball	May 7, 1900	880 00
Mississagi Island	L. D. McDonald	May 16, 1896	460 00
Mohawk Island	R. O. Smithers	March 31, 1896	460 00
Morris Island	Mrs Catherine Rowan	April 1, 1908	150 00
McKay's Point	Joseph Harvey	July 10, 1907	300 00
McKie's Point	Dosithée Daoust	Sept. 21, 1893	180 00
McQuestion Point	Elizabeth McLeod	Feb. 22, 1904	130 00
McTavish "	J. Campbell	Nov. 18, 1896	130 00
Narrow Island	A. B. Boyter	Jan. 3, 1898	320 00
Nine Mile Point	Stannes Veech	Mar. 7, 1894	800 00
Nigger Island	Carson Jeffrey	April 28, 1894	240 00
Niagara on the Lake	Fred Masters	Nov. 12, 1904	460 00
" " Range	Robert Allen	July 19, 1907	180 00
Nottawasaga Island	J. F. Burmister	May 2, 1904	555 00
Oakville Pier	Maurice Felan	April 28, 1894	180 00
Oka and Wharf	H. Lacroix	Nov. 10, 1898	150 00
Owen Sound	Archibald McLean	Dec. 23, 1897	150 00
Otter Head	Robert McMenemy	Nov. 17, 1903	460 00
Papineauville	Joseph Chabot	June 17, 1897	125 00
Pelee Island	J. R. Lidwell	July 10, 1869	325 00
Pelee Passage	F. Malott	Nov. 11, 1902	500 00
"	F. F. Goulin	Aug. 2, 1904	550 00
"	Louis Langlois	Feb. 25, 1903	650 00
Peninsula Harbour	D. B. Hawkins	Aug. 31, 1891	555 00
Pie Island	James Forbes	April 1, 1908	325 00
Pigeon Island	J. H. Davis	May 16, 1896	420 00
Point à Cadieux	Simeon Poirier	" 4, 1904	180 00
Point au Baril	Ole Aanson	July 10, 1907	345 00
Point Aux Anglais	Lucas H. Masson	Sept. 4, 1897	240 00
Point Aux Pins	Alexander McKinnon	May 16, 1904	400 00
Point Clark	M. McDonald	Jan. 8, 1897	460 00
Point Edward	Louis Knauff	May 23, 1908	180 00

SESSIONAL PAPER No. 21

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of Canada.

ABOVE MONTREAL—*Continued.*

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Point Peter	G. J. Scott	June 6, 1901	800 00
Point Pleasant	Frank Connors	Oct. 13, 1898	345 00
Point Porphyry	Andrew Dick	Aug. 10, 1880	450 00
Port Arthur	J. C. Banks	April 28, 1903	265 00
Port Burwell	John Sutherland	June 18, 1894	400 00
Port Colborne	D. A. Fortier	April 11, 1865	550 00
Port Colborne Fog-Alarm	Hugh Clarke	May 30, 1904	850 00
Port Credit	John Miller	Dec. 16, 1897	180 00
Port Dalhousie	Bernard McGrath	Oct. 2, 1907	345 00
" " Fog-Alarm	Bernard McGrath		
Port Elgin	R. M. Lowry	Mar. 14, 1896	120 00
Port Dover	Silas L. Butler	July 15, 1897	345 00
Port Maitland	Mrs. James Grant	June 29, 1907	385 00
Port Stanley	John L. Oliver	Dec. 16, 1907	345 00
Presqu' Isle	Hugh H. McKenzie	May 7, 1907	205 00
Presqu' Isle Main	Hugh E. Smith	April 29, 1898	350 00
" " "	W. B. Ainsworth	Oct. 12, 1907	600 00
Providence Bay	John B. Sinclair	Mar. 6, 1906	335 00
Rain's Wharf	W. W. Rain's	Aug. 1892	70 00
Rainy River	Patrick O'Conuor	June 23, 1904	295 00
*Red Rock	(see Snug Harbour)		*
Red River Range	William Hughes	Feb. 12, 1892	395 00
Richard's Landing	R. Armstrong	1907	60 00
Rigaud	Capt. A Malette	Oct. 27, 1907	150 00
Rondeau	W. R. Fellows, jr	Dec. 18, 1888	420 00
Rosseau	J. G. Dixon	July 21, 1890	130 00
Sailors' Encampment	A. M. Rains	Aug. 1, 1892	80 00
Salmon Point	Amos McDonald	July 12, 3897	345 00
Saugeen	D. McAulay	Mar. 16, 1899	150 00
Scotch Bonnet	Cyrus R. Spencer	April 7, 1903	425 00
Silver Islet	Capt. Jas. Cross	May 18, 1905	130 00
Shoal Point	E. E. Rains	Nov. 24, 1884	320 00
Slate Island	Alex. B. Sutherland	July 21, 1908	490 00
Snake Island	John Whitmarsh	" 18, 1900	350 00
*Snug Harbour	Adam Brown	April 11, 1900	*
Southampton	James Brown	June 29, 1904	180 00
South Bay Point	Marcellus Vorce	Nov. 21, 1902	240 00
South Baymouth	John A. Ritchie	Sept. 10, 1903	150 00
South River	Frederick Beacher	July 2, 1903	120 00
South East Bay	Thomas Darling	Jan. 31, 1891	90 00
Spanish River or Boyd Island	Mrs. Elizabeth Martin	" 6, 1905	295 00
Ste. Anne de Bellevue	Jos. L. Stocker	May 20, 1902	150 00
" " Locks	F. X Demers	" 17, 1907	85 00
St. Anicet Bar	Donald McKillop	June 8, 1892	285 00
Ste. Placide	Joseph Lafleur	May 25, 1907	170 00
Squaw Island	Neil McDougall	April 25, 1901	240 00
Stag Island	Thos. M. Cowan	Nov. 3, 1903	180 00
Stokes Bay	Alex. Smith	May 14, 1908	240 00
Stripping Point	David Humes	Aug. 27, 1902	225 00
Strawberry Island	William McKenzie	May 4, 1893	370 00
Sulphur Island	J. J. King	" 15, 1905	345 00
Thames River	H. J. Cartier	Oct. 19, 1884	425 00
Thessalon	James Harvey	Nov. 28, 1897	370 00
Tomahawk Island	Thomas Sweeney	Sept. 19, 1902	95 00
Thornbury	Robert Lowe	April 12, 1887	240 00
Telegraph Island	George A. Rowe	Oct. 25, 1895	240 00
Thunder Cape	William Craig	May 17, 1892	880 00
Tombermory	Archibald Currie	Oct. 12, 1903	250 00
Trenton Harbour	William Fitzpatrick	Jan. 27, 1906	150 00
Toronto, East Gap	George McKelvie	June 13, 1905	960 00

* $2.00 per day for this and Snug Harbour Light.

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada—*Continued.*

ABOVE MONTREAL—*Continued.*

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Victoria Island	George Cosgrove	Nov. 14, 1899	420 00
Welcome Island	Adolph Perras	May 10, 1906	760 00
Way Shoal	Moise Beauchamp	Nov. 20, 1906	150 00
Warren's Landing	Hugh McDonald	Aug. 25, 1905	400 00
Wabbi River	A. M. Ross	Oct. 25, 1895	600 00
Weller's Bay	H. J. Chase	Nov. 4, 1898	150 00
West Sister Rock	J. Thibault	Dec. 7, 1905	420 00
Western Island	Thos. J. Richardson	June 27, 1.01	520 00
Whitby	Whitby Hbr. Co	1905	100 00
Whiskey Island and Penetanguishene	Christopher Columbus	Mar. 18, 1893	400 00
Wiarton	William Gilbert	Sept. 13, 1907	75 00
Wilson's Channel	H. G. Duncan	Aug. 25, 1905	360 00
Wolf Island	William Gillespie	Mar. 17, 1885	250 00

BRITISH COLUMBIA.

Active Pass	H. Georgeson	July 21, 1884	960 00
Amphitrite Point	G. W. Grant	April 2, 1906	270 00
Berens Island	S. G. Harrison	Nov. 4, 1897	397 50
Brockton Point	W. D. Jones	Aug. 20, 1890	397 50
Brotchy Ledge	Thos. Sparks	Jan. 1, 1903	120 00
Bare Point	J. Crozier	June 12, 1897	210 00
Ballenas Island	M. Brown	Oct. 3, 1901	922 50
Birnie Island	C. Rudge	May 2, 1905	270 00
Balfour	J. W. Gallup	Jan. 1, 1900	142 50
Cape Beale	W. L. Thompson	Sept. 16, 1908	1,380 00
Carmanah Point	W. P. Daikin	Nov. 4, 1890	1,350 00
Cape Mudge	J. Davidson	June 27, 1898	450 00
Coffin Island	R. Harrap	April 15, 1903	150 00
Crofton Light	R. Allan	May 31, 1907	195 00
Discovery Island	M. A. Croft	April 1, 1902	960 00
Dryad Point	C. Carpenter	Nov. 7, 1899	397 50
Dock Point	Hugh Moore	May 15, 1903	270 00
Danger Reef	R. Harrap	April 15, 1903	150 00
Denman Island	J. A. McMillan	Aug. 15, 1906	450 00
Entrance Island	M. G. Clark	Nov. 26, 1897	1,200 00
Egg Island	J. W. Davies	May 2, 1905	1,380 00
Estevan Point	A. Luckovich	April 1907	668 50
"	J. Bucholz		770 00
Fisgard	Capt. Geo. Johnston	July 20, 1901	500 00
Fiddle Reef	D. H. McNeill	Mar. 21, 1905	450 00
Fraser River Lights and Garry Pt	A. A. Parker	July 1, 1907	450 00
Gallows Point	Western Fuel Co	May 1906	120 00
Green Island	S. Baker	June 21, 1907	1,200 00
Ivory Island	F. Reuter	May 2, 1905	922 50
Joan Point	R. Harrap	April 15, 1903	180 00
Kaslo Spit	Kootenay Electric Co.	Dec. 1, 1897	240 00
Kyuquot Light	A. Ellis	Jan. 21, 1906	270 00
Lawyer Island	F. W. B. Elsterman	April 1, 1905	600 00
Lennard Island	R. Pollock	July 1, 1908	1,500 00
Lennard Island	F. C. Gerrard	Mar. 31, 1905	800 00
Lucy Island	Amos Hanson	May 12, 1908	557 50
Lund Light	Gas Beacon, (No. keeper)		
Merry Island	W. T. Franklin	Jan. 8, 1904	427 50
North Arm Lights	J. F. McMillan	Mar. 29, 1905	270 00
Nanaimo Harbour	H. B. Shaw	June 12, 1907	225 00
Point Atkinson	W. Erwin	Oct. 5, 1880	1,300 00
Portlock Point	W. J. Gillespie	Nov. 1905	487 50
Prospect Point	Jno. Grove	July 7, 1898	397 50
Pointer Island	Jas. Codville	Dec. 26, 1899	465 00

SESSIONAL PAPER No. 21

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada—*Continued.*

BRITISH COLUMBIA—*Continued.*

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			$ cts.
Portier Pass	F. Allison	Nov. 15, 1902	500 00
Proctor	G. W. Gallup	Jan. 1, 1900	270 00
Pilot Bay	E. Montreuil	Oct. 17, 1907	500 00
Pine Island	A. B. Gurney	April 1, 1907	1,380 00
Pultney Point	E. Hukkla (Temporary)	Feby. 1, 1907	500 00
Pachena Point	W. R. Pillar	Sept. 5, 1907	1,500 00
Quatsino Light	G. H. Jackson	Jan. 29, 1907	300 00
Race Rocks	F. Eastwood	" 21, 1891	1,380 00
Saturna Island	Jas. Georgeson	Oct. 26, 1889	660 00
Sand Head's Lt. Ship	M. O'Brien	" 1, 1904	1,200 00
Sisters	B. Blanchard	Feb. 20, 1905	922 50
Sechelt	Gas Beacon, (No keeper)		
Scarlet Point	Wm. Hunt		397 50
Sechart Light	G. Strickland	Mar. 27, 1908	195 00
Sooke Light	A. Codtel	April 15, 1907	142 50
Trial Island	H. S. O'Kell	Aug. 20, 1906	1,200 00
Victoria Harbour	Thos. Sparks	Jan. 29, 1903	180 00
Walker Rock	John Georgeson	Feb. 8, 1900	270 00
Yellow Island	John Doney	May 1, 1905	735 00

APPENDIX

STATEMENT of Expenditure by the Marine Department

—	1868.	1869.	1870.	1871.
	$ cts.	$ cts.	$ cts.	$ cts.
Maintenance of Lights—				
Above Montreal	40,561 28	42,306 69	46,289 05	44,054 01
Montreal District	23,053 56	25,762 54	21,669 49	22,453 52
Below Quebec	45,615 35	41,651 73	43,730 61	31,582 75
Nova Scotia	46,460 72	56,394 88	43,682 86	76,230 77
New Brunswick	20,488 00	23,893 00	27,485 14	20,542 29
Prince Edward Island				
British Columbia				
Construction—				
Above Montreal	3,136 15		2,976 83	8,770 55
Quebec	7,323 75	7,492 59	1,543 06	
Nova Scotia	22,041 42	6,905 80	18,967 23	10,948 31
New Brunswick			11,555 91	8,735 73
Prince Edward Island				
British Columbia				
Dominion steamers—				
Quebec	69,026 73	37,176 02	34,549 49	59,797 05
Nova Scotia	14,778 92	26,603 94	19,759 96	13,139 86
New Brunswick				
Prince Edward Island				
British Columbia				
Examination of masters and mates			908 12	1,407 66
Hudson Bay expedition				
Investigation into wrecks			140 00	
Marine Hospital, Quebec	19,977 36	19,221 45	21,618 73	19,823 18
Marine hospitals	1,070 86	15,615 71	15,652 62	15,728 93
Meteorological service	8,200 00	8,950 00	8,950 00	9,370 82
Registration of Canadian shipping				
Removal of obstructions			2,350 07	1,000 00
Rewards for saving life				
Signal service				
Steamboat inspection	7,106 93	7,999 00	7,396 96	8,321 00
Survey, Georgian Bay				
Water police, Montreal	27,445 35	10,238 71	9,323 31	8,030 00
" Quebec		12,633 59	9,038 62	9,379 73
Civil Government	15,083 88	18,064 25	19,401 05	20,220 96
Steam communication—				
Between Quebec and Maritime Provinces				
Between Prince Edward Island and mainland				
Purchase of steamers to replace—				
Glendon				
Lady Head				
Winter mail service, Prince Edward Island				
Tidal observations				
Gratuities				
Survey, Burrard Inlet				
Export cattle trade				
	371,070 56	360,899 90	36,212 91	389,537 12

No. 11.

from Confederation to March 31, 1909.

1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
57,609 16	61,036 47	60,798 75	71,937 18	68,344 18	65,421 00	73,175 11	74,587 78	65,518 61
22,369 00	31,143 14	20,939 13	15,000 00	12,999 48	15,998 00	15,996 00	14,917 95	16,523 88
41,936 00	65,645 00	102,056 09	110,362 00	98,792 93	89,980 41	96,904 00	93,178 61	96,703 87
67,806 24	100,953 80	114,711 91	114,344 51	143,125 56	128,496 00	132,888 95	120,951 33	116,189 60
23,369 12	29,266 85	53,439 04	60,119 02	62,551 61	50,998 00	58,989 00	57,499 02	61,252 82
.....	.....	3,357 71	12,584 64	13,730 53	11,817 00	16,986 66	12,158 72	15,288 17
.....	13,207 09	18,519 50	15,983 72	17,175 97	15,853 00	18,948 78	15,152 73	15,576 99
6,940 45	18,999 38	24,461 86	14,286 65	13,320 40	16,267 98	7,207 96	11,993 75	13,297 81
57,818 35	39,303 87	41,950 82	19,325 00	24,336 47	12,945 29	12,776 47	4,154 58	7,797 75
34,760 12	90,181 79	51,867 94	43,898 63	42,214 55	25,550 00	13,500 00	17,386 97	7,069 01
9,561 14	16,691 06	31,572 60	8,842 97	17,819 85	7,083 82	12,028 13	22,598 14	4,985 53
.....	.....	.....	.....	11,829 61	17,752 00	2,504 47	2,560 88	6,074 50
.....	.....	4,353 93	8,799 07	8,477 67	29 66	.....	.....	.....
47,500 00	51,758 05	64,490 00	79,043 70	62,971 49	49,987 66	42,683 00	44,972 79	49,318 93
20,999 63	24,999 57	30,008 99	22 992 62	133,826 08	38,739 39	43,027 00	42,016 53	49,438 93
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	16,241 26	61,782 63	28,933 63	16,332 05	14,429 52
12,115 96	15,984 72	10,555 67	41,796 74	10,156 56	16,095 90	12,193 40	7,460 68	9,733 34
4,312 07	6,466 18	4,520 19	5,696 62	4,672 08	4,050 00	4,249 76	4,250 12	4,253 43
.....	.....	.....	.....	.....	.....	.....	.....	.....
874 00	1,068 89	2,313 31	366 00	466 41	342 65	500 00	1,691 00	676 73
21,000 00	21,000 00	20,456 45	21,994 75	23,795 85	19,965 97	19,987 50	20,791 77	12,991 23
53,536 16	27,150 43	45,986 87	37,111 67	37,155 72	42,449 55	37,487 10	37,445 57	35,040 00
12,618 15	18,830 54	36,700 59	33,580 00	45,560 03	44,871 38	46,050 24	45,706 13	45,554 51
.....	.....	272 30	1,096 46	412 06	842 14	1,435 10	239 26	257 75
.....	.....	.....	450 00	.....	203 00	462 00	305 86	825 00
2,284 32	1,975 13	4,931 78	3,552 86	2,292 20	1,958 55	4,071 00	2,533 10	2,263 15
.....	.....	1,000 00	.....	.....	.....	.....	.....	.....
8,500 00	13,266 00	10,291 68	12,200 00	13,081 86	13,073 01	13,228 38	13,076 46	11,854 34
.....	.....	.....	.....	.....	.....	.....	.....	.....
10,000 00	14,453 87	12,370 86	13,395 00	14,090 00	13,524 29	14,062 00	13,462 74	13,131 06
10,348 00	18,200 00	26,526 66	24,500 00	27,136 68	21,482 08	23,498 06	23,023 26	22,094 48
22,644 52	25,336 04	30,087 23	31,328 16	32,789 18	32,304 12	32,682 05	36,610 19	35,033 95
.. ..	.....	15,000 00	10,000 00	10,000 00	.....	.. ..	....	.. ..
.....	....	.....	.....	766 00	....	.....	.. ..	.....
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518,958 49	706,817 92	845,150 90	844,586 09	970,146 27	820,054 38	786,156 23	755,359 47	723,390 89

9-10 EDWARD VII., A. 1910

STATEMENT of Expenditure by the Marine Department

—	1881.	1882.	1883.
	$ cts.	$ cts.	$ cts.
Maintenance of lights			
Above Montreal	65,541 21	71,048 50	70,116 68
Montreal District	14,326 36	21,643 05	22,260 32
Below Quebec	89,781 29	91,098 66	102,784 99
Nova Scotia	128,918 59	137,846 15	150,793 17
New Brunswick	63,921 90	66,073 00	75,946 92
Prince Edward Island	12,997 36	16,385 72	17,907 27
British Columbia	17,570 72	17,803 00	18,349 06
Cape Race			
Construction—			
Above Montreal	14,180 02	13,581 00	9,782 27
Quebec	7,539 76	3,731 31	9,672 55
Nova Scotia	7,757 52	13,355 00	9,422 70
New Brunswick	4,578 52	2,253 80	1,022 57
Prince Edward Island	8,150 06	3,092 00	1,934 49
British Columbia	8,655 39	3,237 90	1,005 26
Queen's Printer			
Dominion steamers—			
Quebec	64,973 00	44,923 98	45,156 13
Nova Scotia	36,700 00	31,049 74	37,841 07
New Brunswick			
Prince Edward Island	15,139 95	23,911 97	19,680 00
British Columbia	11,788 09	8,504 61	25,484 00
Department			
Examination of masters and mates	3,888 41	3,981 00	4,021 20
Hudson's Bay expedition			
Investigation into wrecks	310 48	863 19	875 64
Marine Hospital, Quebec	19,964 33	19,938 12	19,998 53
Marine hospitals	32,218 94	33,162 45	29,880 78
Meteorological service	46,163 54	47,464 07	51,990 25
Registration of Canadian shipping	607 43	2,013 28	168 84
Removal of obstruction	150 00	1,116 51	35 80
Rewards for saving life	1,806 13	2,212 00	2,534 00
Signal service			3,365 33
Steamboat inspection	12,211 65	14,835 00	16,209 00
Hydrographic surveys			77 81
Water Police, Montreal	21,953 26	21,994 74	15,798 24
Water Police, Quebec	13,497 81	20,221 82	22,520 41
Civil Governemnt	36,447 50	36,789 46	37,988 39
Steam communication—			
Between Quebec and Maritime Provinces			
Between Prince Edward Island and mainland			
Repairs to wharfs			
Purchase of steamers to replace—			
Stanley			392 55
Glendon			
Lady Head			
Winter mail service, Prince Edward Island			
Tidal observations			
Gratuities			
Survey, Burrard Inlet			
Export cattle trade			
Survey, Bay of Quinté			
Relief of distressed Canadians			
Manning ships			
Widow of late A. Warren			
McDonald Bros			
Parliamentary returns			
Investigating effect of Chicago drainage canal			
John McDonald			
Longitude, Montreal			
Marine biological station			
	761,730 62	774,831 53	825,010 82

SESSIONAL PAPER No. 21

from Confederation to March 31, 1909—*Continued.*

1884.	1885	1886.	1887.	1888.	1889.	1890.	1891.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
70,788 27	70,697 89	85,713 98	75,690 74	85,588 70	72,721 23	84,035 65	93,180 72
22,946 43	23,262 94	33,289 28	16,735 49	17,510 17	12,285 79	118,750 70	122,741 89
101,302 35	118,856 94	131,095 29	131,540 80	108,278 67	112,690 20		
142,909 72	137,439 40	143,153 24	117,708 53	133,009 92	140,197 15	139,459 56	139,916 83
86,670 70	92,130 28	76,046 63	96,425 28	73,465 49	78,285 79	61,608 91	61,089 31
19,059 92	20,218 83	22,282 52	17,852 13	14,796 62	19,118 51	16,968 80	19,000 46
18,107 54	15,497 76	15,783 75	16,230 43	19,604 63	16,877 12	16,411 49	19,595 22
.....	.....	.....	4,453 25	5,124 20	7,358 01	.....	.....
18,432 63	27,977 42	36,678 16	18,383 20	6,341 97	8,623 76		9,796 28
3,168 48	4,354 87	5,877 84	1,260 00	2,287 86	12,203 06		3,723 14
12,489 35	4,352 42	5,905 17	5,330 89	5,533 48	6,039 91		4,596 94
2,868 70	7,667 42	2,421 66	5,280 75	1,542 61	2,966 36	23,863 09	208 16
2,158 60	879 40	.....	384 60	.....	.....		410 00
2,830 38	5,223 11	4,942 70	321 84	5,918 00	1,890 00		14,417 25
.....	.....	.....	26 58	.....	40 14		.....
43,019 13	51,092 98	51,485 03	50,714 52				
27,726 60	42,921 27	30,283 27	32,287 10				
.....	.....	24,633 26	14,337 23				
19,539 52	33,962 54	20,927 58	19,987 67	150,659 19	126,629 33	114,956 20	111,437 03
16,111 83	12,485 07	13,430 69	10,809 07				
.....	.....	.....	13,288 83				
5,580 79	6,656 44	5,239 28	4,858 98	5,063 96	4,381 04	4,177 83	4,255 24
480 69	71,374 69	35,217 10	14,762 61	165 00	.....	.....	.....
830 12	385 15	592 63	520 14	513 91	516 67	888 94	1,172 77
19,990 34	19,996 68	16,047 95	19,706 96	18,777 62	18,643 14	10,279 08	751 75
31,401 30	45,371 29	32,229 02	32,545 35	30,667 67	33,089 20	31,450 03	33,303 37
56,418 16	56,625 40	56,898 33	57,140 74	59,986 10	58,577 07	58,452 10	62,457 10
189 27	237 88	157 13	233 13	897 02	179 21	647 52	1,207 07
342 76	2,259 21	1,237 34	4,190 83	2,500 94	3,603 65	5,737 26	3,633 65
2,614 91	5,221 15	8,147 22	7,363 94	6,825 48	5,503 44	8,150 92	4,952 20
6,704 17	3,881 05	4,622 00	5,082 17	4,441 59	5,092 54	4,976 80	4,700 79
21,893 28	23,235 04	21,775 57	22,847 57	21,430 45	22,213 03	20,989 52	22,183 76
26,745 54	20,454 68	17,759 36	21,592 55	19,424 14	17,808 46	17,969 23	17,677 51
19,021 93	17,683 59	20,933 75	17,413 47	18,725 95	16,948 82	13,164 00	573 80
22,958 79	20,399 33	22,922 82	22,935 65	18,553 57	14,698 68	8,620 61	7,279 85
38,775 00	29,900 83	30,453 57	37,193 62	32,728 78	43,501 96	42,835 78	42,253 67
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	133,505 60	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
56,164 71	47,228 03	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	5,985 42	6,312 93	.....	.....	.....	.....
.....	.....	.....	.....	7,740 25	1,842 47	2,752 67	7,012 70
.....	.....	.....	.....	.....	.....	244 75	1,888 71
.....	.....	.....	.....	.....	200 00	80 00	1,025 00
.....	.....	.....	.....	.....	.....	.....	1,690 12
.....	.....	.....	.....	.....	.....	.....	520 85
.....	.....	.....	.....	.....	.....	.....	.....
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927 241 61	1,129,901 14	980,120 59	917,557 31	883,250 85	1,023,801 34	807,417 53	885.410 11

STATEMENT of Expenditure by the Marine Department

—	1892.	1893.	1894.	1895.	1896.	1897.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Maintenance of lights—						
Above Montreal	87,033 61	87,598 15	78,090 69	82,541 16	82,256 28	80,961 06
Montreal District						
Below Quebec	116,531 27	120,404 19	124,348 80	124,763 81	124,143 66	126,186 60
Nova Scotia	148,815 26	150,445 26	137,339 73	140,977 53	123,234 65	124,671 19
New Brunswick	66,886 69	71,079 46	59,917 96	69,654 46	63,018 64	56,871 02
Prince Edward Island	17,069 98	16,819 64	15,569 39	17,976 67	17,988 15	16,429 23
British Columbia	26,858 68	24,413 27	27,240 77	21,734 18	24,770 44	25,679 52
General Account						
Construction—						
Above Montreal	21,704 05	8,766 62	12,581 15	2,699 40	11,993 84	9,527 94
Quebec	809 27	10,097 18	4,743 13	3,004 14	3,300 30	296 26
Nova Scotia	1,965 16	4,381 24	3,104 77	4,737 03	1,842 94	61 71
New Brunswick	1,845 35	1,271 15	115 45	1,597 80	200 00	1 60
Prince Edward Island	1 56	2,958 61	1,604 00			452 90
British Columbia	9,478 81		6,356 43	180 83	225 50	569 99
Lake St. Peter						
New Dredge						
Dominion Steamers— Quebec, Nova Scotia, New Brunswick, Prince Edward Island, British Columbia	145,899 61	163,097 46	178,183 97	169,661 64	145,315 28	136,940 11
Naval Schools						
Examinations of masters and mates	6,363 88	4,116 99	3,745 53	2,757 29	4,062 82	3,536 29
Hudson's Bay expedition						19,091 32
Investigation into wrecks	603 21	643 49	850 81	351 15	483 98	565 25
Lighthouse depot, Georgian Bay						
Marine Hospitals	34,106 83	35,757 07	38,403 94	38,589 05	36,682 96	37,984 71
Meteorological service	67,138 06	64,165 60	66,440 96	64,588 34	66,600 29	67,397 71
Registration of Can. shipping	462 59	1,476 19	394 00	207 40	517 60	531 55
Removal of obstructions	2,878 68	1,554 53	202 02	2,217 36	456 38	631 86
Rewards for saving life	6,398 93	7,432 64	8,014 67	6,591 34	8,004 38	5,955 19
Signal service	5,014 42	5,040 58	4,668 93	5,311 54	5,338 76	5,986 12
Steamboat inspection	22,736 59	24,386 95	25,961 36	26,385 88	26,321 27	26,837 83
Hydrographic surveys	16,451 10	17,542 11	31,461 76	12,653 28	15,099 63	12,352 99
Ship channel	6,161 60	5,436 23				
Civil Government	43,195 31	56,477 23	54,988 88	71,373 82		74,801 37
Repairs to wharfs		84 90	1,007 67	824 38	2,644 69	1,795 56
Purchase of steamer *Minto*						
Winter mail service, P.E.I.	3,309 44	4,376 96	6,497 03	6,138 18	7,779 69	21,931 05
Tidal observations	711 59	5,099 17	10,172 61	11,507 24	9,627 45	13,166 20
Gratuities			3,261 32			
Survey, Burrard Inlet	2,580 45					
Export cattle trade	1,411 57	1,711 73	1,350 83	2,268 74	2,887 24	
Survey, Bay of Quinté		2,085 45				
Relief of distressed Canadians				7 30		
Parliamentary returns					291 08	
Investigation effect Chicago grain canal					2,500 00	
John MacDonald					200 00	
Unforeseen expenses						
Marine biological station						
New life-saving station, Long Point						
Salaries, temporary clerks						
Steamer to replace *Bayfield*						
Observatory, Sulphur Mtn.						
Charles Morrison						
Montreal Pilotage Commissioners						
Montreal wireless telegraphy						
Purchase land for wharf at Halifax, N.S.						

from Confederation to March 31, 1909—*Continued.*

1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
87,841 22	92,751 23	82,810 92	93,708 16	92,195 52	117,896 37	154,194 26	244,960 38
.....	136,134 79	122,112 42	132,147 88	154,839 06	148,302 34	170,554 10	273,865 74
116,279 88	.....	.....	.....	.....	.....	.....	.....
126,3?6 00	65,072 35	122,414 86	142,359 01	149,572 14	142,725 69	164,339 92	204,157 27
67,369 98	128,674 15	52,491 93	65,247 80	69,133 51	73,410 65	79,464 50	121,289 44
18,112 93	20,569 81	42,878 40	28,031 85	24,223 73	25,575 33	25,603 09	36,760 32
26,862 03	29,530 20	33,545 95	31,938 25	35,119 03	35,758 43	39,068 34	55,976 59
.....	.....	.....	.....	46 75	.....	.....	.....
6,867 69	3,729 62	7,094 64	12,499 99				
3,649 90	37,838 80	40,319 03	17,060 13				
4,067 99	3,123 16	4,884 22	12,832 69	158,714 09	399,487 73	540,675 07	1,447,202 77
1,423 34	91 49	.....	266 34				
1,409 60	616 96	5,586 91	922 00				
6,414 19	19,305 60	.....	4,160 74				
.....	.....	.....	660 03	.....	.....	.....	93,938 90
.....	.....	.....	.....	.....	.....	.....	10,745 36
117,644 39	145,270 75	180,430 65	195,484 75	452,526 92	369,813 97	306,171 01	475,907 20
.....	.....	.....	.....	.....	.....	6,106 54	3,123 24
3,335 40	3,568 26	3,750 69	3,730 25	3,305 59	4,968 36	7,761 17	5,884 74
27,050 66	.....	.....	.....	.....	.....	178,638 94	236,469 60
312 77	982 17	773 06	1,022 65	1,824 55	1,367 45	3,570 28	5,111 34
.....	.....	.....	.....	.....	.....	.....	12,000 60
38,162 56	37,353 29	37,743 30	36,008 75	51,827 13	48,750 15	50,301 78	51,731 56
64,135 71	73,148 05	76,692 42	74,082 76	80,147 46	87,293 00	90,306 99	98,820 21
818 33	966 48	266 43	546 62	607 23	417 25	1,203 56	1,215 14
704 17	745 49	252 19	1,000 00	1,325 25	382 98	752 60	9,521 68
5,081 40	7,049 09	7,007 97	8,519 92	8,278 55	9,306 25	11,763 12	9,592 91
4,993 88	6,067 90	5,906 83	8,950 17	6,452 56	6,863 75	7,740 01	8,755 44
26,342 29	28,035 49	72,965 72	29,247 59	27,493 80	30,172 09	33,723 12	50,187 75
15,306 66	13,664 97	12,600 98	16,170 20	25,488 64	35,243 97	41,366 95	103,926 98
.....	.....	.....	.....	.....	.....	.....	511,171 41
74,644 05	72,833 97	63,331 61	68,776 95	70,246 32	84,442 53	91,985 07	102,735 31
1,618 97	.....	697 87	1,261 06	2,824 28	1,721 91	1,300 89	1,590 61
.....	144,365 29	41,951 88	.....	.....	.....	.....	.....
9,575 31	8,439 70	1,503 70	2,093 93	8,835 86	6,211 28	8,912 57	10,984 74
3,081 45	5,186 35	4,372 18	7,060 20	8,925 33	14,520 00	21,871 71	23,802 24
.....	.....	.....	.....	136 85	1,050 00	1,210 00	2,340 00
.....	.....	.....	.....	.....	.....	.....	.....
2,499 80	2,737 85	2,762 24	2,746 84	3,321 23	3,026 25	3,504 43	3,300 35
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	133 32	.....	95 10	.....	269 20
.....	.....	.....	1,659 14	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	3,452 21	2,630 62	3,490 29	4,822 78	3,977 63	2,953 19
.....	5,709 10	739 61	1,990 58	1,998 85	2,000 00	2,996 54	2,001 69
.....	.....	.....	.....	1,780 52	.....	.....	.....
.....	.....	.....	.....	2,967 35	6,945 96	11,448 10	15,881 35
.....	.....	.....	.....	50,000 00	.....	.....	.....
.....	.....	.....	.....	55 00	3,167 62	.....	.....
.....	.....	.....	.....	223 00	.....	.....	.....
.....	.....	.....	.....	3,691 69	.....	.....	.....
.....	.....	.....	.....	.....	1,745 23	2,050 00	10,776 51
.....	.....	.....	.....	.....	3,528 25	18,847 31	40,785 1

STATEMENT of Expenditure by the Marine Department

—	1892.	1893.	1894.	1895.	1896.	1897.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Purchase land for wharf at Charlottetown, P.E.I.						
Schools for navigation						
Naval militia						
Cattle inspection						
Wrecking plant						
Ice-breaking steamers						
S. Shaw						
Salaries, lightkeepers						
Agencies, rents, &c.						
Maintenance and repairs						
Repairs to lightships						
Construction and apparatus						
	861,426 86	898,720 03	905,654 34	895,828 28	793,634 49	867.772 90

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from Confederation to March 31, 1909—*Continued.*

1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
						15,119 11	
						13,000 00	
						5,036 29	
						9,135 87	
						3,335 52	
						25,000 00	
						164,414 93	
						39 33	
						242,403 64	
						29,739 50	
						531,920 43	
						23,560 00	
						1,605,778 59	
856,192 50	1,102,601 90	982,561 97	1,029,925 32	1,501,618 88	1,671,494 77	2,150,940 31	4,747,722 81

STATEMENT of Expenditure by Marine Department from Confederation to March 31, 1909—*Continued.*

—	1906.
	$ cts.
Dominion steamers—	
Quebec	
Nova Scotia	
New Brunswick	587,885 89
Prince Edward Island	
British Columbia	
Examination of masters and mates	7,068 15
Hudson's Bay expedition	132,707 52
Investigation into wrecks	7,476 07
Marine hospitals	50,120 42
Meteorological service	99,719 52
Registration of Canadian shipping	1,800 00
Removal of obstructions	4,967 15
Rewards for saving life	11,991 43
Signal service	8,194 39
Steamboat inspection	37,590 22
Hydrographic surveys	120,359 68
Ship channel	587,957 51
Repairs to wharfs	2,960 47
Winter mail service, Prince Edward Island	16,680 58
Tidal observations	28,047 77
Unforeseen expenses	3,765 17
Marine biological station	2,914 03
Salaries, temporary clerks	19,947 01
Purchase land for wharf at Halifax, N. S.	88,032 87
Schools for navigation	5,036 29
Naval militia	9,135 87
Cattle inspection	3,335 52
Wrecking plant	25,000 00
Ice-breaking steamers	161,414 93
S. Shaw	39 23
Salaries, lightkeepers	242,403 64
Agencies, rents, &c.	29,739 50
Maintenance and repairs	531,920 43
Repairs to lightships	23,560 00
Construction and apparatus	1,605,778 59
Submarine signal apparatus	50,547 60
Administration of pilotage	12,066 42
Parry Sound Buoy Depot	11,711 17
Compensation *re* explosion of gas buoys	38,686 49
Water system, Partridge Island	2,957 37
Observatory, Toronto	2,872 96
" Montreal	500 00
Hydrographic steamer, *Atlantic coast*	45,500 00
" " *Pacific coast*	370 01
New dredge No. 15	150,001 32
" *Galveston*	159,847 89
Shipwrecked and distressed seamen	598 81
Parliamentary returns	485 11
Gratuities	616 66
Civil Government, salaries	88,453 31
" " contingencies	19,506 45
	5,066,252 66

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STATEMENT of Expenditure by Marine Department from Confederation to March 31, 1909—*Continued.*

Service.	Amount.	Total. 1907.
	$ cts.	$ cts.
Ocean and river—		
Dominion steamers	447,139 03	
Examination of masters and mates	5,934 16	
Rewards for saving life—life-boats, &c.	9,025 89	
Investigations into wrecks	8,662 16	
Schools for navigation	4,891 69	
Registration of Canadian shipping	1,506 53	
Removal of obstructions in navigable waters	7,377 20	
Tidal service	19,214 79	
Winter mail service	11,998 01	
Marine biological stations	1,537 04	
Cattle inspection	2,743 80	
Wrecking plant	15,000 00	
Hudson's Bay expedition	33,871 95	
" " patrol boat	29,977 91	
Ice-breaking steamer *Lady Grey*	66,293 51	
Quebec Coal Company's claim	1,000 00	
Arresting two sailors of the *Hector*	148 75	
H. M. Stewart, clothing destroyed by fire	171 00	
Unforeseen expenses	3,213 62	
		669,717 04
Lighthouse and coast—		
Salaries and allowances of lightkeepers	197,235 03	
Agencies, rents and contingencies	22,076 58	
Maintenance and repairs to lighthouses	499,597 86	
Construction of lighthouses and apparatus	1,159,906 40	
Breaking ice in Thunder Bay	21,303 85	
Signal service	6,859 68	
Marconi stations	53,532 19	
Pilotage	21,490 73	
Repairs to wharfs	1,747 15	
Salaries, temporary clerks	14,477 16	
Georgian bay and Parry Sound buoys	4,500 43	
		2,002,727 06
Scientific institutions and hydrographic surveys—		
Observatory, Toronto	2,313 67	
" Kingston	375 00	
" Montreal	375 00	
Meteorological service	75,163 20	
Hydrographic surveys	84,435 32	
		161,662 19
Dredge No. 15		150,000 00
Cap à la Roche		1,347 87
Galveston		50,089 77
Ship channel		419,398 19
Compensation to L. O'Brien		2,200 00
Marine hospitals	37,362 11	
Shipwrecked and distressed seamen	793 56	
		38,156 67
Steamboat inspection		32,459 55
Returns for Parliament	634 36	
K. Falconer, reorganizing system of bookkeeping	25,000 00	
		25,634 36
Civil Government, Salaries	68,995 81	
" " Contingencies	14,182 31	
		83,178 12
Total, Marine Branch		3,637,569 82
" Fisheries Branch		534,669 90
Fishing bounty		159,015 75
		4,331,255 47

STATEMENT of Expenditure by Marine Department from Confederation to March 31, 1909—*Continued.*

EXPENDITURE for the fiscal year ended March 31, 1909.

	Amount.	Total, 1908.
Ocean and River Service—		
Dominion steamers and ice-breakers	$669,428 59	
Examination of masters and mates	11,508 31	
Rewards for saving life	31,642 41	
Investigations into wrecks	6,543 08	
Schools of navigation	7,378 07	
Registration of shipping	1,982 70	
Removal of obstructions	26,009 59	
Tidal service	30,977 40	
Winter mail service	11,019 79	
Cattle inspection	3,503 90	
Wrecking plants	30,000 00	
Unforeseen expenses	1,301 61	
Naval militia	9,078 17	
Patrolling waters in northern portion of Canada	34,706 39	
New ice-breaking steamer	5,974 61	
Returns to Parliament		
		$881,054 56
Public Works—Chargeable to Capital—		
Ship channel	$761,916 84	
Permanent piers in Lake St. Peter, &c.	116,063 87	
Dredging, Cap à la Roche	75,000 00	
Dredge *Beaujeu*	100,000 00	
Spur line, Sorel shipyard	8,815 05	
Montreal and Quebec Signal Service	12,232 15	
		$1,074,027 91
Lighthouse and Coast Service—		
Agencies, rents and contingencies	$ 29,359 26	
Salaries and allowances to lightkeepers	285,050 14	
Maintenance and repairs to lighthouses	689,319 86	
Parry Sound buoy depot	41,983 93	
Construction of lighthouses, &c.	715,572 91	
Construction of apparatus	801,636 83	
Wireless stations	114,986 60	
Signal service	9,350 28	
Administration of pilotage	31,087 22	
Maintenance and repairs to wharfs, &c	1,456 86	
Maintenance and upkeep of dock yards	30,656 22	
Breaking ice, Lake Superior, &c.	37,053 32	
Salaries of temporary clerks, &c.	16,728 99	
Telephone reporting stations below Montreal	7,820 68	
Steamer for the Great Lakes		
Service of expert accountants	13,066 34	
Charter of steamer, Lime Kiln Crossing	6,650 00	
Keeping lights on 'Castle' and 'Arminia'	3,680 00	
		2,835,459 44

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STATEMENT of Expenditure by Marine Department from Confederation to March 31, 1909—*Concluded.*

EXPENDITURE for the Fiscal year ended March 31, 1909—*Concluded.*

Scientific Institutions and Hydrographic Surveys—		
Meteorological service	$122,572 86	
Magnetic observatory	2,918 20	
Montreal observatory	500 00	
Kingston observatory	500 00	
Hydrographic surveys	115,631 31	
Hydrographic survey steamer for B.C.	107,250 00	
		$349,373 37
Marine hospital	$ 59,957 92	
Shipwrecked and distressed seamen	342 25	
Marine hospital at Yarmouth, N.S.	7,285 00	
		67,585 17
Steamboat inspection	$ 42,210 43	
Fisheries		800,081 73
Civil Government Salaries, Marine and Fisheries	103,916 53	
Contingencies of Marine and Fisheries	21,146 77	
		125,063 30
Total expenditure Marine and Fisheries		$6,174,855 91
Fishing bounty		156,114 50

Expenditure for 1908-9 is Appendix No. 5 in this report to be added to statement of expenditure since confederation.

APPENDIX No. 12.

LIVE STOCK SHIPMENTS SEASON 1908-9.

SHIPPED FROM MONTREAL.

Months.	Cattle.	Sheep.	Horses.	Hay.	Grain for Feed.	Men.	U. S. Cattle.
1908.				Lbs.	Lbs.		
May	9,312	305	29	2,449,150	756,180	372	
June	9,462	1,478	13	2,467,820	760,908	381	
July	15,886	1,485	3	4,634,870	758,880	629	
August	17,962	1,399	13	5,283,610	741,840	702	
September	15,796	2,435	18	4,769,170	821,090	636	
October	16,332	1,416	24	4,928,450	729,630	636	
November	15,080	1,593	16	4,727,910	590,760	598	
	99,830	10,111	116	29,260,980	5,159,360	3,954	10,398

United States cattle included in the total of 99,830.

FROM THE PORT OF ST. JOHN, N.B.

Months.	Cattle.	Sheep.	Horses.	Hay.	Grain for Feed.	Men.	U.S. Cattle.
1908.				Lbs.	Lbs.		
December	5,448		27	1,827,'37	209,612	218	
1909.							
January	7,032	151		2,135,256	457,585	280	
February	2,729		12	798,340	212,272	111	
March	3,259			949,150	266,030	133	220
April	4,455		12	1,375,325	359,500	178	
	22,923	151	65	7,086,008	1,604,999	920	220

United States cattle included in the total of 22,923.

FROM THE PORT OF HALIFAX, N.S.

Date.	Cattle.	Hay.	Grain for Feed.	Men.
1908.		Lbs.	Lbs.	
December	1,119	347,671	46,420	44
1909.				
January	1,536	520,870	122,376	62
February	252	79,400	25,200	11
March	74	20,000	6,100	3
April	116	29,250	9,300	6
	3,097	997,191	209,396	126

DIFFERENT Ocean Lines by which the Live Stock was shipped during season 1908-9, from Montreal.

Ocean Line.	Cattle.	Sheep.	Horses.
Allan Line	14,656	.....	18
Dominion Line	13,580	6,141	.....
Thompson Line	15,117	.....	.....
Donaldson Line	22,727	678	55
Canadian Pacific Steamship Co	29,120	3,224	8
Furness Withy Line	4,620	.....	.....
Elder Dempster Line	.....	68	.....
	99,820	10,111	81

TOTAL shipments of Live Stock from Canada and Ports in Great Britain, &c., to which the Live Stock was shipped.

London	48,502	2,654	40
Liverpool	39,336	7,389	10
Glasgow	26,760	151	73
Manchester	7,192	.....	.....
Bristol	4,060	.....	.....
South Africa	.....	68	.....
	125,850	10,262	123

COMPARATIVE STATEMENT of the number of Cattle shipped from Canada to British ports from the years 1902-3 to 1908-9.

	SHEEP.			CATTLE.			HORSES.			TOTALS.		
	Montreal.	St. John.	Halifax.	Montreal.	St. John.	Halifax.	Montreal.	St. John.	Halifax.	Sheep.	Cattle.	Horses.
1908-9	10,111	151	Nil.	99,830	22,923	3,097	116	65	Nil.	10,262	125,850	181
1907-8	11,585	4,168	"	96,977	20,210	Nil.	174	51	"	15,753	127,187	225
1906-7	10,791	1,371	"	128,160	31,148	"	661	57	"	12,162	159,308	718
1905-6	19,077	3,971	"	126,871	33,543	1,042	568	79	"	23,048	161,456	647
1904-5	49,422	17,293	"	108,553	33,833	745	279	213	"	66,715	143,131	492
1903-4	57,741	23,428	1,475	133,594	25,855	5,456	361	31	31	82,644	164,905	423
1902-3	61,017	19,310	426	147,201	37,453	3,856	373	115	17	80,753	188,510	503

APPENDIX No. 13.

MARINE HOSPITALS AND PORTS AT WHICH SICK SEAMEN WERE TREATED.

GEORGE J. DESBARATS, Esq.,
Acting Deputy Minister of Marine and Fisheries,
Ottawa, Ont.

SIR,—I have the honour to submit the annual report of the transactions in the Marine Hospitals Service, for the fiscal year ended March 31, 1909.

I have the honour to be, sir,
Your obedient servant,

C. H. GODIN, M.D.,
Med. Supt. Marine Hospitals' Service.

MARINE HOSPITALS SERVICE.

EXPENDITURE FOR 1908-9.

Amount of appropriation	$55,000 00
Amount of expenditure	54,999 85
Balance	$ 0 15

Province.	Number of Seamen.	Number of Days.	Total Expenditure.
			$ cts.
Nova Scotia	1,826	13,569	23,871 32
New Brunswick	424	2,336	6,514 09
Prince Edward Island	366	1,265	4,259 58
Quebec	683	4,144	9,231 25
British Columbia	485	5,177	9,363 92
General Account			1,759 69
	3,784	26,491	54,999 85

Nova Scotia.

Table showing the Expenditure for each Port.

Port.	Number of Seamen.	Number of Days.	Total Expenditure.
			$ cts.
Advocate	3	9	15 85
Amherst	13	49	179 25
Annapolis Royal	15	40	124 70
Apple River	2	35	64 00
Arichat	32	669	922 90
Baddeck	4	.....	40 00
Barrington	21	91	372 00
Barton	9	162	400 17
Bear River	6	84	188 50
Belliveau's cove	3	.....	5 00
Bridgewater	8	.....	24 50
Canning	1	63	64 25
Canso	81	176	510 68
Chester	1	35	369 37
Cheverie	1	11	29 00
Cheticamp	20	.....	69 50
Church Point	1	91	138 40
Clark's Harbour	47	365	560 75
Clementsport	5	101	162 34
D'Escousse	1	16	6 00
Digby	44	466	499 72
Economy	2	40	67 55
Freeport, Westport, Tiverton	43	1,590	863 29
Glace Bay	15	126	414 00
Guysborough	2	.....	5 75
Halifax City Hospital	3	11	35 68
Halifax Victoria Hospital	146	3,020	4,188 40
Hantsport	1	.....	2 00
Ingram Docks	7	.....	31 75
Isaac's Harbour	3	.....	7 75
La Have	5	.....	158 75
Liscomb	6	126	466 50
Liverpool	11	368	272 50
Lockport	17	273	222 70
Louisburg	16	232	1,335 41
Lunenburg	40	1,198	1,258 57
Mahone Bay	17	.....	54 95
Margaree	1	.....	28 50
Margeretsville	1	.....	2 00
Meteghan	6	254	263 61
North East Harbour	2	.....	65 00
North Port	6	.....	18 60
North Sydney	232	.....	539 65
Parsboro	88	.....	302 45
Pictou	65	151	1,149 73
Point Tupper	4	49	286 01
Port Dufferin	3	.....	30 50
Port Gréville	6	98	165 00
Port Hastings	20	.....	54 75
Port Hood	1	.....	2 50
Port Latour	14	21	147 75
Port Morien	22	.....	125 00
Port Mulgrave	4	.....	17 50
Port Wade	8	91	168 75
Pubnico	12	.....	181 00
Pugwash	10	.....	20 50
River Bourgeois	9	.....	71 25
River Hebert	6	.....	45 50
Salmon River	1	40	112 15
Sandy Cove	14	250	487 62
Sheet Harbour	3	.....	10 00
Marble Mountain	1	.....	3 00
Shelburne	3	23	73 50
Sherbrooke	3	.....	42 75
Carried forward	.....	.....	18,547 00

Nova Scotia—*Concluded.*

Table showing the Expenditure for each Port.—*Concluded.*

Port.	Number of Seamen.	Number of Days.	Total Expenditure.
			$ cts.
Brought forward			18,547 00
Ship Harbour	1		5 00
Springhill	1	8	7 20
Stoney Island	1	59	17 70
St. Peters	24	14	201 00
Sydney	62	1,586	2,142 40
Tusket Wedge	1		17 00
Wallace	4		43 15
Weymouth	28	286	367 90
Windsor	22	45	117 25
Wolfville	2		2 00
Yarmouth	82	1,138	2,403 72
	1,826	13,569	23,871 32

New Brunswick.

Table showing the Expenditure for each Port.

Port.	Number of Seamen.	Number of Days.	Total Expenditure
			$ cts.
Baie Verte	1	5	7 50
Bathurst	4	51	289 69
Beaver Harbour	1		16 00
Buctouche	7		13 00
Cambellton	98		484 86
Cape Tormentine	7	17	147 75
Caraquet	5		10 75
Dalhousie	23	3	133 75
Dorchester	4		66 40
Douglastown	78	276	1,220 16
Grand Manan	7		68 10
Grand Harbour	9	117	313 22
Harvey	2		12 30
Hillsborough	10	108	352 80
Moncton	13		200 00
Point Wolfe	1		16 00
Richibucto	5		200 00
River Louison	8		42 00
St. Andrews	1		3 75
St. John	125	1,759	2,566 10
St. Martins	6		55 46
St. Stephens	1		86 50
Shediac	6		200 00
Shippegan	2		8 00
	424	2,336	6,514 09

Prince Edward Island.

Table showing the Expenditure for each Port.

Port.	Number of Seamen.	Number of Days.	Total Expenditure.
			$ cts.
Alberton	6		13 95
Cardigan	2		22 65
Charlottetown Hospital	13	501	756 55
P.E.I. Hospital	10	469	679 30
Crapaud	3		11 25
Georgetown	15		69 05
Miminegash	6		84 75
Montague	16		26 35
Murray Harbour	37	7	545 20
Souris	177	288	1,128 58
Summerside	70		785 50
Tignish	10		130 45
Vernon River	1		6 00
	366	1,265	4,259 58

Quebec.

Table showing the Expenditure for each Port.

Port.	Number of Seamen.	Number of Days.	Total Expenditure.
			$ cts.
Batiscan	5		40 00
Carleton	3		7 50
Chicoutimi	5	34	99 60
Frazerville	8	28	61 30
Gaspé	44	14	208 00
General Account			400 00
Grand River	2		5 75
Magdalen Islands	18	15	99 25
Matane	14	21	183 25
Montreal Alexandra Hospital	1	35	73 00
Montreal General Hospital	146	999	1,704 20
Montreal Notre Dame Hospital	158	2,048	3,011 50
Montreal Victoria Hospital	1	4	6 00
New Richmond	7	10	85 90
Pasbebiac	11		218 75
Percé	14		57 50
Port Daniel	5		20 50
Quebec Hotel Dieu	24	177	265 50
Quebec Jeffery Hale	53	647	961 50
Rimouski	19	8	80 75
Ste. Anne des Monts	4		52 80
St. Jean	103	18	807 70
St. Thomas de Montmagny	3	9	40 20
Seven Islands	1	21	310 00
Sorel	11		38 50
Three Rivers	23	47	392 30
	683	4,144	9,231 25

British Columbia.

Table showing the Expenditure for each Port.

Port.	Number of Seamen.	Number of Days.	Total Expenditure.
			$ cts.
Chemainus	18	378	719 99
Nanaimo	226	191	845 50
Port Simpson	2	33	56 90
Union Bay	88	235	927 15
Vancouver, St. Paul's Hospital	54	1,968	2,952 00
Victoria St. Joseph	4	114	179 00
Victoria Marine Hospital	93	2,258	3,683 38
	485	5,177	9,363 92

GENERAL ACCOUNT.

Superintendent's salary to 1st of September, 1908	$ 500 00
Superintendent's travelling expenses	776 28
Doctor Grenfell's grant	200 00
Printing	204 16
Stationery	77 55
Express charges	1 70
	$1,759 69

N.B.—The superintendent's salary was charged to civil government after September 1, 1908.

TABLE SHOWING EXPENDITURE FOR TREATMENT, BOARD, SUPPLIES, ETC.

—	Nova Scotia.	New Brunswick.	Prince Edward Island.	Quebec.	British Columbia.	General Account.
	$ cts	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Board in hospitals and private houses	8,528 09	2,760 57	1,607 57	6,222 30	5,607 05	
Medical and surgical treatment	6,262 30	947 31	2,328 55	988 20	621 15	
Medical officers and keepers' salaries	5,517 33	2,125 00	312 50	1,518 75	2,250 00	500 00
Fuel	796 28	96 05	.....	.....	214 50	
Supplies, drugs and instruments	1,483 60	187 73	.....	.....	361 20	281 71
Telephone	133 65	77 07	.....	.....	66 00	
Water	17 00	.....	.....	.....	39 60	
Transportation	188 25	34 86	5 25	77 00	19 30	777 98
Repairs and maintenance	781 94	1 00	.....	.....	15 85	
Special nursing	120 87	.....	5 71	25 00	72 75	
Burials	42 00	16 25	.....	.....	.....	
Miscellaneous	.....	68 25	.....	.....	.....	
Grants	.....	200 00	.....	400 00	.....	200 00
Light	.....	.....	.....	.....	96 52	
Totals	23,871 32	6,514 09	4,259 58	9,231 25	9,363 92	1,759 69

TABLE SHOWING AMOUNT OF SALARIES PAID TO MEDICAL OFFICERS AND KEEPERS DURING 1908-09.

Nova Scotia.	$ cts.	*New Brunswick.*	$ cts.
Bear River—		Bathurst—	
Medical officer	150 00	Medical officer	150 00
Canso—		Campbellton—	
Medical officer	375 00	Medical officer	350 00
Digby—		Douglastown—	
Medical officer	250 00	Medical officer	525 00
Keeper	50 00	Keeper	250 00
Freeport—		Hillsboro—	
Medical officer	300 00	Medical officer	250 00
Liverpool—		Moncton—	
Medical officer	100 00	Medical officer	200 00
Louisburg—		Richibucto—	
Medical officer	250 00	Medical officer	200 00
Keeper	350 00	Shediac—	
Lunenburg—		Medical officer	200 00
Medical officer	287 50		2,125 00
Keeper	150 00		
North Sydney—		*British Columbia.*	
Medical officer	400 00		
Parrsboro—		Chemainus—	
Medical officer	300 00	Medical officer	450 00
Pictou—		Nanaimo—	
Medical officer	698 33	Medical officer	600 00
Keeper	200 00	Victoria—	
Point Tupper—		Medical officer	600 00
Medical officer	100 00	Keeper	600 00
Keeper	144 00		2,250 00
Port Morien—			
Medical officer	125 00	*Quebec.*	
Sydney—			
Medical officer	625 00	Gaspé—	
Keeper	300 00	Medical officer	200 00
Yarmouth—		Paspebiac—	
Medical officer	362 50	Medical officer	218 75
	5,517 33	St. Jean—	
		Medical officer	750 00
		Three Rivers—	
Prince Edward Island.		Medical officer	350 00
		General Account — Superintendent's salary up to Sept. 1, 1908	500 00
Summerside—			2,018 75
Medical officer	312 50		
		Total amount of salaries	12,223 58

TABLE SHOWING EXPENDITURE FOR TREATMENT, COMPRISING DOCTORS' SERVICES, DOCTORS' TRAVELLING EXPENSES, DRUGS AND BOARD.

NOVA SCOTIA.

Ports.	Doctors' Services.	Doctors' Travelling Expenses.	Drugs.	Board.	Total Expenses.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Advocate	9 00		3 00	3 85	15 85
Amherst	97 00	27 00	29 25	26 00	179 25
Annapolis	85 00		23 00	16 70	124 70
Apple River	11 00	35 00	3 00	15 00	65 00
Arichat	327 00	147 50	212 15	236 25	922 90
Barrington	150 00	159 00	24 00	39 00	372 00
Baddeck	14 00	18 00	8 00		40 00
Barton	134 50	93 00	39 85	69 42	336 77
Belliveau's Cove	3 00		2 00		5 00
Bridgewater	16 00		8 50		24 50

TABLE SHOWING EXPENDITURE FOR TREATMENT, COMPRISING DOCTORS' SERVICES, DOCTORS' TRAVELLING EXPENSES, DRUGS AND BOARD.

NOVA SCOTIA—*Continued.*

Ports.	Doctors' Services.	Doctors' Travelling Expenses.	Drugs.	Board.	Total Expenses.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Canning	22 00		7 75	34 50	64 25
Chester	275 00		14 50	37 00	326 50
Canso				135 68	135 68
Cheverie	4 00	20 00		5 00	29 00
Chitecamp	57 50		12 00		69 50
Church Point	49 00	40 50	8 90	35 00	133 40
Clark's Harbour	225 00	126 75	96 40	112 60	560 75
Clementsport	37 00	73 00	6 05	46 29	162 34
Bear River				38 50	38 50
D'Escousse				6 00	6 00
Digby				199 72	199 72
Economy	17 00	17 00	12 55	21 00	67 55
Freeport, &c.				553 29	553 29
Glace Bay	294 00		14 00	104 00	412 00
Guysborough	5 00		0 75		5 75
Halifax City Hospital	10 50	12 00		10 68	33 18
Halifax Victoria General				4,110 90	4,110 90
Hantsport	1 00		1 00		2 00
Ingram Docks	8 00	21 00	2 75		31 75
Isaac's Harbour	6 00	0 50	1 25		7 75
La Have	39 00	100 50	19 25		158 75
Liscomb	50 00	330 00	32 50	54 00	466 50
Lockeport	94 75		19 25	105 70	219 70
Liverpool				172 50	172 50
Louisburg				99 08	99 08
Lunenburg				516 63	516 63
Mahone Bay	56 00		18 95		54 95
Marble Mountain	3 00				3 00
Margaree	15 00	7 50	6 00		28 50
Margaretsville	1 00		1 00		2 00
Metegnan	122 00	9 40	38 60	91 61	261 61
North East Harbour	31 00	18 00	16 00		65 00
Northport	11 00		7 60		18 60
North Sydney			67 65		67 65
Pictou				65 63	65 63
Port Dufferin	5 00	25 00	0 50		30 50
Port Gréville	76 00	22 00	21 50	45 50	165 00
Port Hastings	21 00	13 00	20 75		54 75
Port Hood	1 00	0 50	1 00		2 50
Port Latour	62 00	70 25	3 50	12 00	147 75
Port Mulgrave	10 00		7 50		17 50
Port Wade	16 00	88 00	24 25	40 50	168 75
Point Tupper				21 01	21 01
Pubnico	70 00	85 00	26 00		181 00
Pugwash	12 00		8 50		20 50
River Bourgeois	18 00	40 00	13 25		71 25
River Hebert	23 00	14 00	8 50		45 50
Salmon River	18 00	72 00	5 00	17 15	112 15
Sandy Cove	213 75	130 00	51 60	92 27	487 62
Sheet Harbour	4 00	1 00	5 00		10 00
Shelburne	48 00	3 50	4 00	10 00	65 50
Sherbrooke	13 00	17 50	12 25		42 75
Ship Harbour	3 00		2 00		5 00
St. Peters	49 00	103 50	40 50	6 00	199 00
Sydney				675 44	675 44
Tusket Wedge	8 00	6 00	3 00		17 00
Wallace	19 00	15 00	9 15		43 15
Weymouth	124 00	46 75	59 70	109 60	340 05
Windsor	63 00		29 75	24 50	117 25
Wolfville	1 00		1 00		2 00
Yarmouth				487 69	487 69
Springhill				7 20	7 20
Stony Island				17 70	17 70
	3,138 00	2,008 65	1,115 65	8,528 09	14,790 39

TABLE showing expenditure for the treatment comprising Doctor's services, Doctors' travelling expenses, Drugs and Board.

NEW BRUNSWICK.

Ports.	Doctors' Services.	Doctors' Travelling Expenses.	Drugs.	Board.	Total Expenses.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Baie Verte	5 00			2 50	7 50
Bathurst				36 42	36 42
Beaver Harbour	2 00	10 00	4 00		16 00
Buctouche	9 00		4 00		13 00
Campbellton	100 00				100 00
Cape Tormentine	63 00	40 00	19 25	25 50	147 75
Caraquet	4 50	1 00	5 25		10 75
Dalhousie	72 00	1 50	41 80	6 20	121 50
Dorchester	56 00	5 00	5 40		66 46
Douglastown				118 33	118 33
Grand Manan	40 00	13 00	15 10		68 10
Grand Harbour	105 00	72 00	29 50	106 72	313 22
Harvey	4 00	4 00	4 30		12 30
Hillsboro				102 80	102 80
Point Wolfe	1 00	14 00	1 00		16 75
River Louison	11 50	29 00	1 50		42 00
St. Andrews	3 00		75		3 75
St. Stephens	51 00	25 00	10 50		86 50
St. John				2,362 10	2,362 10
St. Martins	24 00	25 00	6 46		55 46
Shippegan	2 00		6 00		8 00
	553 00	239 50	154 81	2,760 57	3,707 88

PRINCE EDWARD ISLAND.

Ports.	Doctors' Services.	Doctors' Travelling Expenses.	Drugs.	Board.	Total Expenses.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Alberton	7 00		6 95		13 95
Cardigan	15 00		7 65		22 75
Charlottetown Hospital				754 05	754 05
Prince Edward Island Hospital				679 30	679 30
Crapaud	8 00	50	2 75		11 25
Georgetown	33 00	4 00	32 05		69 05
Miminegash	22 00	41 00	21 75		84 75
Murray Harbour	272 00	124 00	146 20	3 00	545 20
Souris	605 00		343 90	171 22	1,120 12
Summerside	473 00				473 00
Tignish	87 00	4 00	39 45		130 45
Vernon River	4 00		2 00		6 00
Montague	18 00		8 35		26 35
	1,544 00	173 50	611 05	1,607 57	4,136 12

SESSIONAL PAPER No. 21

TABLE showing Expenditure for treatment, comprising Doctors' services, Doctors' travelling expenses, Drugs and Board.

QUEBEC.

Ports.	Doctors' Services.	Doctors' Travelling Expenses.	Drugs.	Board.	Total Expenses.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Batiscan	29 00		11 00		40 00
Carleton	3 00		4 50		7 50
Chicoutimi	27 00		21 00	51 60	99 60
Fraserville	20 00	3 50	9 80	28 00	61 30
Gaspé				8 00	8 00
Grand River	5 00		75		5 75
Magdelen Islands	28 00	33 00	25 50	11 25	97 75
Matane	128 00	6 00	17 75	31 50	183 25
Montreal Alexandria				70 00	70 00
Montreal General				1,660 20	1,660 20
Notre-Dame Hospital				2,985 00	2,985 00
Victoria Hospital, Montreal				4 00	4 00
New Richmond	24 00	20 00	31 90	10 00	85 90
Quebec Hotel-Dieu				265 50	265 50
Jeffery Hale, Quebec				961 50	961 50
Rimouski	35 75	17 00	24 50	3 50	80 75
Port Daniels	7 00	3 00	10 50		20 50
Percé	23 00	14 00	20 50		57 50
Ste. Anne Des Monts	9 00	31 00	12 80		52 80
St. Jean				57 70	57 70
St. Thomas de Montmagny	27 00		5 95	7 25	40 20
Seven Islands	109 00	151 00		25 00	285 00
Sorel	16 00	5 00	17 50		38 50
Three Rivers				42 30	42 30
	490 75	283 50	213 95	6,222 30	7,210 50

BRITISH COLUMBIA.

Ports.	Doctors' Services.	Doctors' Travelling Expenses.	Drugs.	Board.	Total Expenses.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Chemainus				269 99	269 99
Nanaimo				239 50	239 50
Port Simpson	34 00			22 90	56 90
Union Bay	281 00	120 00	186 15	340 00	927 15
Vancouver, St. Paul's				2,952 00	2,952 00
Victoria, St. Joseph				179 00	179 00
Victoria Marine Hospital				1,603 66	1,603 66
	315 00	120 00	186 15	5,607 05	6,228 20

DETAILED EXPENDITURE FOR FUEL.

Nova Scotia—		
Louisburg Marine Hospital	$105 00	
Lunenburg Marine Hospital	192 75	
Pictou Marine Hospital	171 78	
Sydney Marine Hospital	100 25	
Yarmouth Marine Hospital	226 50	
		$796 28
New Brunswick—		
Bathurst Marine Hospital	$22 92	
Douglastown Marine Hospital	73 13	
		96 05
British Columbia—		
Victoria Marine Hospital	$214 50	
		214 50
Total expenditure for fuel		$1,106 83

DETAILED EXPENDITURE FOR WATER SUPPLY.

Nova Scotia—Sydney Hospital	$17 00	
British Columbia—Victoria Marine Hospital	39 60	
Total expenditure for water		$56 60

DETAILED EXPENDITURE FOR TELEPHONE SERVICE.

Nova Scotia—		
Lunenburg Marine Hospital	$41 66	
Sydney Marine Hospital	30 75	
Yarmouth Marine Hospital	61 25	
		$133 66
New Brunswick—		
Douglastown	77 07	
		77 07
British Columbia—		
Victoria	66 00	
		66 00
Total expenditure for telephone		$276 73

DETAILED EXPENDITURE FOR REPAIRS AND MAINTENANCE.

Nova Scotia—		
Louisburg	$246 88	
Sydney	234 66	
Yarmouth	300 40	
		$781 94
New Brunswick—		
Douglastown	$1 00	
		1 00
British Columbia—		
Victoria	15 85	
		15 85
Total expenditure for repairs and maintenance		$798 79
Total expenditure for telephone		$276 73

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DETAILED Expenditure for Drugs, Surgical Instruments, Furniture, Stationery, etc.

—	Drugs and Surgical Instruments	Other Supplies.	Total.
	$ cts.	$ cts.	$ cts.
Nova Scotia—			
Louisburg	266 38	.....	266 38
Lunenburg	67 80	.....	67 80
Sydney	58 50	98 80	157 30
Pictou	.....	13 99	13 99
Point Tupper	21 00	.....	21 00
Yarmouth	632 37	324 76	957 13
	1,046 05	437 55	1,483 60
New Brunswick—			
Bathurst	12 10	.....	12 10
Douglastown	150 09	25 54	175 73
	162 19	25 54	187 73
British Columbia—			
Victoria	326 85	34 35	361 20
General account	.....	281 71	281 71
Total expenditure for drugs, &c.	.....	.....	2,314 24

GRANTS TO SEAMEN'S SOCIETY.

Montreal Sailor's Club	$ 200 00
Montreal Seamen's Institute	200 00
St. John's Seamen's Mission	200 00
Dr. Grenfell's Deep Sea Mission	200 00
Total amount	$800 00

AMOUNT OF EXPENDITURE FOR TRANSPORTATION.

Nova Scotia—		
Barton	$ 10 40	
Church Point	5 00	
Glace Bay	2 00	
Halifax City Hospital	2 50	
Halifax Victoria Hospital	37 50	
Louisburg	18 07	
Lunenburg	2 23	
North Sydney	72 00	
Parrsboro'	2 45	
Weymouth	27 85	
Yarmouth	8 25	
		$188 25
New Brunswick—		
Campbellton	$ 34 86	
		34 86

AMOUNT OF EXPENDITURE FOR TRANSPORTATION.

Prince Edward Island		
Charlottetown	$ 2 50	
Souris	2 75	
		5 25
Quebec—		
Magdalen Islands	$ 1 50	
Montreal Alexandra Hospital	3 00	
Montreal General Hospital	44 00	
Montreal Notre Dame	26 50	
Montreal Victoria Hospital	2 00	
		77 00
British Columbia—		
Nanaimo	$ 6 00	
Victoria	13 30	
		19 30
General Account—		
Travelling expenses	$776 28	
Express charges	1 70	
		777 98
Total amount for transportation		$1,102 64

TOTAL EXPENDITURE FOR NURSING.

Nova Scotia—		
Barton	$ 53 00	
Chester	42 87	
Lockeport	3 00	
Shelburne	8 00	
St. Peters	2 00	
Sydney	2 00	
Freeport	10 00	
		$120 87
Prince Edward Island—		
Souris	$ 5 71	
		5 71
Quebec—		
Magdalen Island	25 00	
		25 00
British Columbia—		
Victoria	72 75	
		72 75
Total expenditure for nursing		$224 33

TOTAL EXPENDITURE FOR LIGHT.

British Columbia—	
Victoria Marine Hospital	$96 52

TOTAL EXPENDITURE FOR BURIALS.

Nova Scotia—		
Halifax Vict	$40 00	
Meteghan	2 00	
		42 00
New Brunswick—		
Dalhousie	$12 25	
St. John	4 00	
		16 25
Total amount for burials		$58 25

TOTAL EXPENDITURE FOR MISCELLANEOUS.

New Brunswick—	
Bathurst	$ 68 25
Total amount of physicians' travelling expenses in outports, where there are no marine or other hospitals	$2,825 15
Amount of expenditure for drugs supplied to sick seamen, outside of hospitals, or outside of ports where physicians received a fixed salary	$2,281 61

Total number of vouchers for each province—	
General account	38
British Columbia	108
Prince Edward Island	86
New Brunswick	111
Nova Scotia	574
Province of Quebec	97
Total	1,014

TABULAR STATEMENT showing Diseases for which Seamen received treatment during 1908-9.

General Diseases—905.

Small-pox	8	Diseases dependant on animal parasites:—	
Measles	10	Scabies	12
Scarlet fever	3	Tenia	2
Influenza	111	Poisoning by tobacco	1
Mumps	1	Scurvy	3
Diphtheria	13	Alcoholism	5
Cerebro Spinal fever	1	Rheumatism	136
Enteric fever	93	Gout	2
Choleric Diarrhœa	18	Osteoarthritis	5
Epidemic Diarrhœa	7	New Growths non-malignant	1
Dysentry	57	New Growths malignant	2
Beriberi	4	Anemia	6
Malarial fever	49	Diabetes Mellitus	3
Erysipelas	28	Congenital Malformations	1
Septicemia	28	Debility	13
Tubercle	45	Tetanus	2
Syphilis	78		
Gonorrhea	157	Total	905

TABULAR STATEMENT showing Diseases for which Seamen received treatment during 1908-9—*Continued.*

Local Diseases—2,239.

Diseases of the nervous system	126
1. Of the nerves—	
Neuritis	22
Multiple Neuritis	3
2. Of the Spinal cord and membranes	
Inflammation	2
3. Of brains and membranes—	
Hemorrhage	2
Meningitis	3
Anemia	1
4. Functional nervous diseases with other diseases of undetermined nature—	
Apoplexy	1
Paralysis	7
Spasm	2
Epilepsy	2
Vertigo	1
Headache	4
Neurasthenia	19
Neuralgia	51
Hysteria	2
5. Mental diseases:—	
Insanity	4
Diseases of the eye: 137.	
Conjunctivitis	68
Keratetis	4
Ulceration of Cornea	5
Iritis	23
Optic Neuritis	2
Abscess of lacrymal sac	9
Blepharitis marginalis	7
Abscess of eyelid	6
Ecchymosis of eyelid	13
Diseases of the ear: 57.	
Inflammation of external meatus	6
Accumulation of wax or epidermus	1
Inflammation of middle ear	42
Abscess axilla	8
Diseases of the nose: 13.	
Inflammation of septum	1
Necrosis of septum	2
Inflammation of sinuses	1
Inflammation of neso-pharynx	9
Diseases of the circulatory system: 95.	
Pericarditis	4
Endocarditis	7
Valvular diseases	29
Aneurism heart	2
Inflammation muscular substance herat	4
Angina Pectoris	4
Arteritis	3
Degeneration of arteries	6
Phlebitis	5
Varicose ulcer	31
Diseases of the Respiratory system: 406.	
Inflammation of larynx	22
Bronchitis	217
Spasmodic Asthma	16
Congestion of lungs	4
Hemorrhage of lungs	9
Pneumonia	34
Broncho-Pneumonia	10
Abscess of lungs	4
Phthisis	42
Pleurisy	46
Empyema	1
Injury to lungs	1
Diseases of the Digestive system: 757.	
Inflammation of the mouth	2
Ulceration of the mouth	1
Abscess of dental periosteum	15
Tootache	51
Necrosis alveoli	7
Sore throat	2
Inflammation of the tonsils	65
Inflammation of the pharynx	19
Post pharingeal abscess	2
Inflammation of stomach	169
Ulceration of the stomach	8
Hemorrhage of stomach	5
Dilatation of stomach	1
Indigestion	67
Vomitting	2
Gastralgia	9
Inflammation of the intestines:—	
Enteritis	39
Typhiltis	7
Colitis	13
Appendicitis	27
Duodenitis	2
Intestinal obstruction	1
Constipation	13
Diarrhœa	55
Fistula in ano	4
Prolapsus of rectum	2
Ulcer of rectum	1
Piles	43
Inflammation of the liver	38
Jaundice	7
Hernia	42
Inflammation of hepatic ducts and gall bladder	13
Calculi	5
Biliary colic	2
Inflammation of the peritoneum	16
Dropsy	2
Disease of the lymphatic system: 352.	
Inflammation of lymphatic glands	52
Diseases of the thyroid body: 1.	
Goitre	1
Diseases of the urinary system: 104.	
Acute nephritis	10
Bright's disease	39
Abscess perinephritis	3
Calculi in kidney	2
Calculi in ureter	5
Haematuria	6
Albuminuria	2
Lithuria	1
Phosphaturia	1
Inflammation of bladder	35
Diseases of the generative system: 233.	
Urethritis	4
Stricture of urethra	19
Inflammation of the prostrate	12
Phimosis	9
Paraphimosis	5
Inflammation of the glands	1
Soft chancre	62
Inflammation of the scrotum	21
Inflammation of the spermatic cord	18
Varicocele	34
Inflammation of the testicle	29
Epididymitis	18
Cryptorchidism	1

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TABULAR STATEMENT showing Diseases for which Seamen received treatment during 1908-9—*Continued.*

Local Diseases—Continued.

Diseases of the organs of locomotion: 120.	
Inflammation of the bones	
Osteitis	1
Periostitis	7
Caries	1
Inflammation of the joints	22
Dislocation of ankle	9
Dislocation of spine	1
Psoas, lumbar and other abscesses	26
Lumbago	24
Sciatica	23
Inflammation of bursea	6
Diseases of connective tissues: 21.	
Cellulitis	18
Abcess	1
Gangrene	2
Diseases of the skin: 117.	
Erythema	2
Urticaria	2
Eczema	25
Herpes	5
Dermatitis	1
Acne	1
Seborrhea	1
Ulcer	16
Boils	42
Carbuncle	9
Whitlow	9
Onychia	1
Ringworm	1
Frostbite	2
Total	2,239

Injuries—640.

General Injuries: 29.	
Effects of heat	4
Burns and scalds	20
Multiple injury	2
Suffocation (drowning)	1
Shock	2
Local injuries: 611.	
Rupture of muscles	1
Wound of muscles	1
Burns and scalds of skin	18
Wounds scalp	24
Fracture of vault of skull	1
Concussion of brains	3
Contusion of eyelid	1
Wound of eyelid	2
Wound of eyeball	2
Foreign bodies in nose and other cavities	3
Wound of neck	2
Wound of chest	1
Contusion of chest	2
Fracture of ribs	21
Sprain of back	5
Wound of back	4
Contusion of abdomen	2
Contusion of upper extremities	134
Sprain of shoulder	4
Sprain of elbow	2
Sprain of wrist	34
Sprain of hand	5
Wound of upper extremeties	31
Fracture of clavicle	16
Fracture of scapula	11
Fracture of humerus	46
Fracture of radius	17
Fracture of ulna	27
Fracture of radius and ulna	20
Fracture of carpus metacarpus and phalanges	8
Dislocation of humérus	14
Dislocation of phalanges or thumb	5
Contusion of lower extremities	9
Sprain of hip	8
Sprain of knee	10
Sprain of ankle	45
Sprain of foot	19
Fracture of femur	16
Fracture of patella	2
Fracture of tibia	15
Fracture of febula	6
Fracture of tibia and febula	4
Fracture of bones of foot	1
Malingery	2
Vaccination	1
Incomplete reports	8
Total	640

Total number of seamen treated 3,784

APPENDIX No. 14.

REPORT OF THE CHIEF EXAMINER OF MASTERS AND MATES.

GEORGE J. DESBARATS, Esq.,
Acting Deputy Minister of Marine and Fisheries,
Ottawa, Ont.

SIR,—I beg to submit my annual report giving details of the work I have the honour to supervise respecting examinations of masters and mates throughout the Dominion.

The statistics herewith submitted are from the 1st of September, 1908, date of my last report, to the 1st of April, 1909, covering a period of seven months.

Compared with a corresponding number of months, the records show a marked increase in the number of examinations. It will also be noted that a greater number of failures have occurred, which, conclusively, demonstrate that greater supervision and care have been and are now exercised in order to secure but able and competent men ready to meet the actual requirements of the rapid development of traffic by water.

I am happy to state that the examiners under my supervision are men of high qualifications who have so far performed their onerous duties under trying circumstances in a conscientious and satisfactory manner.

Yearly, more problems are added and a greater knowledge is required from all candidates, and this is, as it should be, the sea-faring class is waking to the fact that higher qualifications are now needed on their part and they have submitted willingly to the inevitable. Shipowners have testified that the class of seamen now available is superior to what was on hand a few years ago; therefore I claim that as the exigencies of traffic become more exacting; for instance, if ship's tonnage increase as well as their number, so must the standard of knowledge of officers who will be placed in charge of property running into hundreds of thousands of dollars.

I contend that as the knowledge in matters pertaining to that profession is increased greater will be the confidence and coolness in times of danger, and as after results, men holding certificates under those conditions, will be inspired with greater self-respect, and it will serve to raise their professional status in a very marked degree.

In connection with those examinations, I beg to bring to your kind attention that in order to secure the highest efficiency, a very exact and conscientious supervision must be exercised, and to expect a devotion to the work so that the best results may accrue, it would be well that the remuneration to examiners be such as to inspire them with the idea that their labours and conscientious attendance to their duties are duly appreciated by the department.

Examination of masters and mates may rightly be classed as first aid to navigation; lights, beacons and buoys are certainly secondary in importance.

In the erection of lighthouses every effort is made to introduce the highest and most efficient illuminating apparatus in order that the lights may warn the navigators of the dangers and its proximity, and all these lights and precautions taken to indicate obstacles in the way of the mariners will be fruitless unless the men in charge are fully conversant with the means and methods to utilize these aids to navigation to the best advantage.

I have the honour to be, sir,
Your obedient servant,

L. A. DEMERS,
Chief Examiner.

STATEMENT.

	Passed.	Failed.
Inland, coasting and minor waters—		
Masters	70	21
Mates	93	25
Sea-going—		
Masters	8	0
Mates	15	8
Second mates	12	8
Service certificates—		
Masters	2	..
Temporary certificates—		
Masters	4	..
Renewed certificates of competency for inland and coasting—		
Masters	8	..
Mates	2	..
Renewed certificates of competency for sea-going—		
Masters	4	..

The ports where examinations for all grades are held are:—

Victoria, B.C., Capt. James Gaudin, examiner.
Vancouver, B.C., Capt. Charles Eddie, examiner.
Halifax, N.S., Capt. W. R. Lugar, examiner.
Yarmouth, N.S., Capt. J. E. Murphy, examiner.
Lunenburg, N.S., Capt. A. J. Wolff, examiner.
North Sydney, N.S., Capt. J. Sutherland, examiner.

Examination for local certificates only held at:—

Montreal, P.Q., Capt. J. Riley, examiner.
Quebec, Que., position at present vacant.
Toronto, Ont., Capt. Charles Moller, examiner.
Collingwood, Ont., Capt. Geo. C. Coles, examiner.
West Selkirk, Man., Capt. M. Thordarson, examiner.
Edmonton, Alta, Capt. A. Grand, examiner.
Nelson, B.C., Lt. Gordon Hallet, examiner.

APPENDIX No. 15.

MARINE SCHOOLS.

GEORGE J. DESBARATS, Esq.,
Acting Deputy Minister of Marine and Fisheries,
Ottawa, Ont.

SIR,—I beg to herewith submit my annual report and statement of attendance at the marine schools under my supervision for the winter of 1908-9.

These marine schools have been instituted with the view of enlightening those who are preparing themselves to enter the sea-faring career as well as those who already have experience in that profession, by delivering a series of lectures treating on all subjects most important to prospective candidates for examination of masters and mates, as well as for pilots and prospective pilots.

By the statement herewith submitted it will be seen that nine lecturers assisted at these lectures.

Through an amendment to the Shipping Act passed last session, by which coasting vessels of hundred and fifty tons are allowed to sail from any port in Canada on a coasting voyage extending to Venezuela, without a qualified master, and that vessels of three hundred tons are allowed to sail without a qualified or certificated mate, has had the effect of diminishing somewhat the attendance at the schools established in Nova Scotia, such as Lunenburg and North Sydney. It will be noted that Vancouver had the largest attendance.

These lectures are given by the examiners of masters and mates, who are thoroughly competent to discuss any matters pertaining to shipping. This subject being of a dry nature, it requires besides the knowledge on the part of the examiners also the talent and fluency of speech, in order to deliver those lectures in an interesting and attractive manner, and I think that those in charge of those schools are fully competent in that way. They have all been supplied with instruments and materials to help them in their task. By means of a reflectoscope, drawings and illustrations are thrown on the screen enabling and helping the lecturer to develop more fully the subjects under analysis.

Though the attendance at Lunenburg and North Sydney is not exactly satisfactory, still I think that sooner or later, our seafarers will come to realize the importance of the matter, and by their steady attendance to the lectures, will convey to the government the expression that the efforts made for their welfare and their education, are fully appreciated.

Owing to the fact that the examiner at Quebec had resigned and that there were no candidates applying for the position, no lectures were given this winter at that port.

I herewith submit a statement of attendance, minimum and maximum at each school.

I have the honour to be, sir,
Your obedient servant,

L. A. DEMERS,
Superintendent of Marine Schools of Canada.

STATEMENT OF ATTENDANCE.

Schools.	Lecturers.	No. of Lectures.	Minimum.	Maximum.	Average.	Total Attendance.
Victoria, B.C.	D. Jones.	33	12	28	18·87	623
Vancouver, B.C.	Capt. Eddie	32	15	50	29·22	934
Yarmouth, N.S.	" Murphy.	32	0	14	7·25	232
Lunenburgh, N.S.	" Wolff.	32	0	18	4·34	139
Halifax, N.S.	" Lugar.	31	4	27	12·42	385
North Sydney, N.S.	" Sutherland.	32	0	11	5·3	176
Midland, Ont.	" Watkins.	36	3	30	19·61	706
Collingwood, Ont	" Coles.	24	2	28	17·4	419
Toronto, Ont.	" Moller.	32	7	18	12·	384

APPENDIX No. 16.

INVESTIGATIONS INTO WRECKS AND CASUALTIES.

GEORGE J. DESBARATS, Esq.,
Acting Deputy Minister of Marine and Fisheries,
Ottawa, Ont.

DEAR SIR,—I beg to submit the annual report with reference to investigations into shipping casualties, held by Captain Spain, during 1908-9, a list of which is annexed.

Besides the casualties mentioned, there are few others, which, through pressure of business, were not investigated at the time, and owing to the long interval between the casualties and the return of the vessels to ports during the present season, it was found, in several cases, useless to deal further with them, as the most important witnesses were unavailable.

I have the honour to be, sir,
Your obedient servant,

L. A. DEMERS.

INVESTIGATIONS HELD BY CAPTAIN SPAIN, 1908-09.

Date.	Name of Vessels.	File Number.	Occurred at.
1908.			
April 29	Bona Vista	28,988	Stranded below Traverse.
July 5	Imperial-Quebec	29,139	Poulier Varennes.
" 12	Portsmouth	29,148	Off Cape Chatte.
" 16	India	29,151	Below Pt. Citrouille Light.
August 7	Premier	29,194	Lake Winnipeg.
" 8	Catalone	29,223	Red Island.
" 11	Sagamo-Kenosha	29,224	Beaumaris.
" 11	Southwark	29,198	West Point, Forteau Bay.
" 15	Sverre	29,221	Traverse Lower Light.
September 5	King Edward	29,263	Chantey Island.
" 6	Gustaf Adolf	29,256	Goose Island.
" 13	Corinthian-Malin Head	29,269	Below Quebec, off St. Laurent
" 17	Marina	29,276	Ashore near Varennes.
" 20	Regulus-Ocland	29,288	
" 20	Amur-Vadso	29,309	McKays Beach, B.C.
October 2	Inishowen Head	29,308	Ashore 5 miles above Quebec.
" 13	Ariel-Energy	29,349	
" 19	Refina-John Irwing	29,326	Halifax Harbour.
" 20	SS. Virginian	29,328	Montreal Harbour.
" 26	SS. Ashanti	29,334	Isle of Orleans.
" 26	Iroquois	29,343	Gulf of Georgia, B.C.
November 6	Lena F. Oxner	29,361	Red Island Reefs.
" 8	C.P.R. Liner and Japanese Liner	29,360	Vancouver Harbour.
1909.			
January 16	Hartfield	29,191	Vancouver Island.
" 16	Bruce	29,228	Baldwins Reefs.

APPENDIX No. 17.

WIRELESS TELEGRAPHY.

GEORGE J. DESBARATS, Esq.,
Acting Deputy Minister of Marine and Fisheries,
Ottawa, Ont.

SIR,—I beg to submit herewith my annual report on the wireless stations belonging to this department.

There were twenty wireless stations operated by the department during the past year, located at the following points:—

Father Point, River St. Lawrence.
Clarke City, "
Fame Point, "
Heath Point, Anticosti.
Cape Bear, Prince Edward Island.
Pictou, Nova Scotia.
Cape Race, Newfoundland.
Whittle Rocks, Gulf of St. Lawrence.
Point Amour, " "
Belle Isle " "
Point Rich, " "
Cape Ray, Newfoundland.
Sydney, Nova Scotia.
Cape Sable, Nova Scotia.
Partridge Island, New Brunswick.
Point Grey, British Columbia.
Victoria, "
Pachena, "
Estevan "
Cape Lazo "

All stations have worked satisfactorily.

On account of not having received complete returns I cannot give the number of messages sent and received from the different stations.

I have the honour to be, sir,
Your obedient servant,

C. DOUTRE,
Supt. Govt. Wireless Stations.

APPENDIX No. 18.

SABLE ISLAND.

SIR,—I beg to submit the following report on equipment, repairs to buildings, stock, patrol, &c., for the year ending December 31, 1908.

WRECKS AND CASUALTIES.

No known wrecks have occurred during the year.

'White Point' buoy drifted ashore on the northeast bar January 12. 'Sambro' automatic gas buoy drifted ashore near the east end light January 18, both of these buoys were taken off by the D.G.S. *Lady Laurier* early in the season.

Two fishermen's dories, no name, came ashore during October.

BOATS AND APPARATUS.

The beach apparatus (Lyle gun) at Nos. 1, 3 and 4 stations are in good condition, also the boats at the different stations. In my report for the year 1907, I pointed out the necessity for another cargo surf boat and a life boat to replace the old boat *Relief* sent off during that year and condemned.

PATROL.

The island was patrolled forty-two times in the morning and thirteen times at night.

STAFF CHANGES.

Wm. H. Horne, keeper of east light, resigned and was succeeded by John Grigoire, April 23.

BUILDING AND REPAIRS.

Men's quarters removed south 100 feet and an addition of seven rooms and cellar built on to it with concrete wall under both main building and addition.

Cattle barn.—Concrete wall under north side and concrete floor under cattle.

Drill pole erected.

No. 4 Station.—Keeper's dwelling raised and concrete blocks placed under for foundation to replace old rotten posts, chimney retopped and new sheeting put under sills. Roof shingles repaired.

FARMING.

This was carried on as usual, but owing to the unusual dry season results were not equal to that of some previous years.

LIVE STOCK ON HAND.

Seventy head cattle, 30 trained ponies, 3 imported stallions, 5 imported mares, 5 hogs, 200 wild ponies.

STOCK KILLED.

	Lbs.
Nine beeves weighing	5,950
Nine hogs weighing	1,300
Six calves weighing	360

SHIPPED.

Forty-nine ponies, quantity salted hides.

CENSUS.

No. 1 Station—

Supt. R. J. Boutilier, daughter and domestic	3	
Carpenter, Wm. Byrne; cook, Roby. Cleary; supernumary, J. Dunn; surfmen, S. Himmelman, A. Byrne, S. Glazebrook, R. S. Boutilier, M. Noonan	8	
	—	11

No 2 Station—

Keeper and coxwain, R. Naugle and family	4	

No. 3 Station—

Keeper, Jas. Ritcey and family	4	
Surfman, E. Osborne	1	
	—	5

No. 4 Station—

Keeper and chief coxwain, Gustav Soderberg and wife	2	
Surfman G. Malally	1	
Surfman Jno. Lee	1	
	—	4

West End Light—

Keeper, A. J. Horne, wife and family	5	
Surfman and assistant, Jas. Horne	1	
	—	6

East End Light—

Keeper, John Grigoire and family	5	
Surfman and assistant, H. Naugle	1	
	—	6

Marconi Wireless Telegraph Station—

Chief, J. D. Taylor; operators, D. Manson, Jas. Surgey, G. Blackburn; cook, Ted Strickland	5	
	—	5
Total		41

(Sgd.) R. J. BOUTILIER,
Supt., Sable Island

APPENDIX No. 19.

LIFE-SAVING SERVICE OF CANADA.

The Deputy Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to report on the life saving service of Canada with respect to the fiscal year 1908-9.

Though I have been connected with this service only about six months, I have visited several of the life-saving stations, my report in regard to which was duly laid before you.

The great purpose of a life-saving station is, as its name indicates, to save human life by providing prompt and sufficient aid, when possible, in cases of shipwrecked and distressed vessels, so as to prevent loss of life by drowning. As a rule the period each year during which a life-saving station is in full operation is during the season of navigation

There are at the present time in Canada 34 life-saving stations of more or less importance and efficiency, established along the sea coasts and on the shores of the great lakes near localities where navigation is the most perilous. The locations of life-saving stations with respect to provinces, are, 3 in New Brunswick, 13 in Nova Scotia, 3 in Prince Edward Island, 4 in British Columbia, and 11 in Ontario (on the great lakes.)

At every life-saving station there is at least a life boat and a crew of seven men including the coxswain under whose immediate care and supervision all manoeuvres and operations of the crew are performed. There is also a boat house. During recent years many of the stations have been supplied with new and up to date life boats costing from $225 to $775 each and one $10,900. Boat houses are built of different sizes according to the number of boats and other equipment to be accommodated, and cost from $600 up. Besides being always on the alert to add to the efficiency of this service in other respects, care is taken by the department to see that the boat houses and boats of the various stations are kept painted and that all other equipment and apparatus are also properly looked after so that the best results may be obtained.

A coxswain appointed by the department is in charge of each life-saving station and its equipment, and is responsible to the department for the proper care of the same. The coxswain also selects the crew for the life boat which, with himself, consists of seven men, and the crew is directly under his charge when on duty whether in service at a wreck or when performing drills of which the maximum number is fourteen each season. As the position of coxswain is a responsible one, the regulations governing this service require that the person appointed to fill that position shall be of good moral character and of sober and correct habits. He must have a fair education and be familiar with the line of coast embraced within his district, and he must possess a thorough knowledge of the management of life boats and of the use of the various apparatus employed in the service. The coxswain must also understand how to properly treat the apparently drowned, according to the written regulations with which every life-saving station is provided. Besides, it is the duty of the coxswain to be always on the lookout to assist persons in danger of drowning. As a rule, a coxswain is allowed $75 per annum for taking care of the station and $2 for each drill. He is also allowed such extra pay when engaged at a wreck as the department considers proper.

The life boat crew at every life-saving station is selected by the coxswain from able-bodied and experienced boatmen residing near the station, so that they will always be available when required. As the efficiency of a life-saving station depends largely upon the good training and discipline of the crew, each crew is required to drill regularly during the season of navigation, in rough water as well as smooth. The number of drills to be performed by a life boat crew is fourteen each season, and must be carried out at regular intervals as fixed by the coxswain, and each drill must occupy at least five hours. Life boat crews as a rule, are paid at the rate of $2 per man for each drill and extra when performing service at a wreck.

I attach hereto a list of the life-saving stations maintained by the Dominion government, showing the name of each station, when established, name of the coxswain and his annual salary, number of the crew and their pay, description and cost of the boat in use, and equipment.

During the year four new life-stations have been established, one at Point Escuminac, N.B., and one each at Clo-oose, Ucluclet and Clayoquet, B.C. The life-saving station at Mud Island, N.S., has been discontinued.

The life-saving stations at St. Pauls Island and Sable Island are under the control of the respective superintendents of the humane establishments of those islands and are amongst the best equipped stations in Canada.

At the life-saving station at Long Point, Lake Erie, the men are employed two or three months longer than at the other stations and their remuneration is more.

While some minor casualties have been reported to the department during the last season in which life-saving crews have rendered assistance to vessels, no serious casualties involving danger to life have taken place.

During the past three years there has been an average yearly expenditure of over $25,000 in connection with this branch of the public service, and a number of the stations have been fitted out with new and expensive apparatus and boats, yet with Canada's almost illimitable stretches of coast lines and ever increasing coasting trade, there is still much to be done to bring this service up to that state of efficiency which its importance demands.

I have the honour to be, sir,
Your obedient servant.

C. E. KINGSMILL,
Officer Commanding the Marine Service of Canada.

Life-Saving Stations maintained

Number.	Stations.	Established.	Coxswain.	Crew.	Coxswain's Salary. — Per annum.	Pay of Crew.
	New Brunswick—				$	
1	Seal Cove	1898	T. Benson	7	75	$2 per day and extra when saving life.
2	Richibucto	1907	Albert Long	7	75	" " ..
3	Point Escuminac	1908	E. F. Fleiger	7	75	" " ..
	Nova Scotia—					
4	Baker's Cove	1886	A. Cain	7	75	" " ..
5	Blanche	1889	W. A. B. Smith	7	75	" " ..
6	Clark's Harbour	1900	T. N. Nickerson	7	75	" " ..
7	Devil's Island	1885	B. H. Henneberry	7	75	" " ..
8	Duncan's Cove	1886	J. W. Holland	7	75	" " ..
9	Herring Cove	1885	J. Gorman	7	75	" " ..
10	Pictou Island	1889	Alex. Currie	7	75	" " ..
11	Port Mouton	1889	Walter Cook	7	75	" " ..
12	Scatarie	1885	J. T. Martell,	7	75	" " ..
13	Seal Island	1880	Thos. Symonds	7	250	$100 per annum.
14	St. Paul's Island	1885	Supt. Humane Establishment.	3	.....	$300 each per annum.
15	White Head	1890	H. P. Munroe	7	75	$2 per drill and extra when saving life.
16	Sable Island	1885	G. Soderberg J. Ritcey	.. ...	250 250	Paid as island staff.
	P. E. Island—					
17	Charlottetown	1907	J. P. Moore	7	75	$2 per drill and extra when saving life.
18	Souris	1907	N. McIntosh	7	75	" " ..
19	Alberton	1907	John Champion	7	75	" " ..
	British Columbia—					
20	Clo-oose	1908	D. Logan	..	60 per m.	$45 per month for three months.
21	Bamfield	1907	W. H. Gillen	....	75 per m.	$50 for engineer, $45 for two men per month.
22	Ucluclet	1908	A. W. Lyche	6	75 per m.	$60 per month for men during season and $100 per annum when boat is not in commission. Volunteers 50 cents per hour when required.
23	Clayoquot	1908	J. Chesterman	7	75	$60 per month when employed. Volunteers 50 cents per hour when required.
	Ontario—Great Lakes—					
24	Coburg	1882	D. Rooney	7	75	$2 per drill and extra when saving life.
25	Collingwood	1885	G. F. Watts	7	75	" " ..
26	Goderich	1886	D. MacKay	7	75	" " ..
27	Kincardine	1903	Thos. McGaw	7	75	" " ..

by the Dominion Government.

Description of Boat.	Cost.	When Built.	Equipment.	Remarks.
	$			
Beebe-McLellan surf-boat, self-bailing, 25 feet long.	250	Shelburne, N.S.	Full regulation..	Iron rails laid in 1901.
Race point surf-boat, 24 feet long..	225	" ..	" ..	
Beebe-McLellan self-bailing... .	225	" ..	" ..	
Dobbin's pattern self-righting, 25 feet long.	575	Dartmouth, N.S.	" ..	Iron rails laid in 1900.
Beebe-McLellan surf boat, self-bailing, 25 feet long.	250	" ..	" ..	New boat, 1901.
Beebe-McLellan self bailing, 25 feet long, low ends.	250	" ..	" ..	
Dobbin's pattern, surf-boat, self-bailing, 25 feet long.	575	" ..	" ..	Lyle gun at this station.
Beebe-McLellan surf-boat, self-bailing, 25 feet long.	250	Shelburne, N.S.	" ..	Lyle gun at this station and new boat in 1903.
" " ..	250	" ..	" ..	
Dobbin's pattern, self-righting and bailing, 25 feet long.	575	Dartmouth, N.S.	" ..	
" " ..	575	" ..	" ..	
Beebe-McLellan surf-boat, self-bailing, 25 feet long.	250	Shelburne, N.S.	" ..	New boat in 1903.
Beebe-McLellan boat on east side.	240	" ..	" ..	"
Beebe-McLellan boat on west side.	240	Halifax, N.S....	" ..	
Beebe-McLellan self-bailing, 25 feet long, low ends.	250	Shelburne, N.S.	" ..	Lyle gun here since 1903.
Doobin's pattern, surf-boat, self-bailing, 25 feet long.	575	Dartmouth, N.S.	" ..	
Two Dobbin's pattern, self-righting and bailing, and one Beebe-McLellan surf-boat, self-bailing.	1,100	Halifax, N.S....	" ..	Lyle gun and rocket apparatus at this station. Coxswain under control of Supt. of Humane Establishment.
Beebe-McLellan self-bailing.	225	Shelburne, N.S.	" ..	
" " ..	225	" ..	" ..	
" " ..	225	" ..	" ..	
Doherty's Improved Beebe-McLellan, 25 feet long.	575	Vancouver Shipyard Co., Vancouver, B.C.	" ..	
Self-righting self-bailing power lifeboat, 36 feet long.	10,900	Bayonne City, U.S.A.	" ..	
Doherty's Improved Beebe McLellan, 25 feet long.	575	Vancouver Shipyard Co.	" ..	
" " ..	575	" ..	" ..	
Dobbin's pattern, self-righting and bailing.	750	Goderich, Ont..	" ..	
Beebe-McLellan self-bailing, surf-boat.	375	Collingwood, O.	" ..	New boat in 1896.
Surf-boat....	330	" ..	" ..	New boat in 1892.
Beebe-McLellan self-bailing, surf-boat.	350	" ..	" ..	New boat in 1903.

LIFE-Saving Stations maintained

Number.	Stations.	Established.	Coxswain.	Crew.	Coxswain's Salary. — Per annum.	Pay of Crew.
					$	
28	Long Point	1902	Geo. Wisner	7	75	$2 per drill and $40 per month for three months.
29	Point Pelee	1900	L. Wilkinson	7	75	$2 per drill and extra when saving life.
30	Port Hope	1889	W. T. Clark	7	75	" "
31	Port Stanley	1885	J. R. Moore	7	75	" "
32	Toronto Island	1883	Wm. Ward	7	75	" "
33	Consecon	1898	John O. McLean	7	75	" "
34	Southampton	1907	John A. MacAuley.	7	75	" "

NOTE—

There are several other places in Canada, not regularly organized, which receive support from the N.S., Cape Tormentine, N.B. and Wellington on Lake Ontario. There is also a life saving station at

by the Dominion Government—*Concluded.*

Description of Boat.	Cost.	When Built.	Equipment.	Remarks.
	$			
Surf-boat...	500	Collingwood, O.	Full regulation..	
"	330	" ..	" ..	A tramway has been constructed at this station.
Dobbin's pattern, self-righting and bailing.	620	Goderich, Ont..	" ..	
Beebe-McLellan surf-boat, self-bailing, 25 feet long.	350	Collingwood, O.	" ..	
Dobbin's pattern, self-righting and bailing.	600	Goderich, Ont..	" ..	Removed from Popular Point in 1900.
" " ..	750	" ..	" ..	Removed from Wellington in 1893.
Beebe-McLellan surf-boat, self-bailing.	330	Collingwood, O.	" ..	

Dominion Government, where there is a life saving service of more or less importance, such as Halifax, Victoria, B.C., maintained by the Victoria Life Saving Association.

APPENDIX

HALIFAX CITADEL

RECORD OF SHIPPING, AS PER RECORD FOLIO,

Year and Month.	British Men-of-War.			Foreign Men-of-War.			1st Class Steamers.			2nd Class Steamers.		
	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.
1908.												
July				1	1		63	60	3	61	61	
August				3	3		54	54		66	66	
September				1	1		54	51	3	61	61	
October	1	1					45	43	2	66	65	1
November							58	52	6	52	52	
December	1	1					62	61	1	60	60	
1909.												
January							59	57	2	40	40	
February							55	54	1	39	39	
March							54	52	2	37	37	
	2	2		5	5		504	484	20	482	481	1

No. 20.

SIGNAL STATION.

FROM JULY 1, 1908, TO MARCH 31, 1909.

SHIPS, BARQUES AND BARQUENTINES.			BRIGS AND BRIGANTINES.			SCHOONERS, 3-MAST OR BEARING PRIVATE SIGNALS.			MONTHLY TOTALS.			Remarks.
Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	
2	2	.....	..	.. ..	. .	5	5	. . .	132	129	3	Total vessels reported 1,054
1	1	.....	1	1	.....	10	10	.....	135	135	... ..	" " arrived 1,033
2	2	.....	.....	.....	.....	5	5	. .	123	120	3	" " passed 21
1	1	..	.....	... ..	.....	7	7	....	120	117	3	
3	3	.. ..	.....	.....	.....	5	5	....	118	112	6	
1	1	.....	.....	.. ..	.....	5	5	.....	129	128	1	
.....	. ..	.....	1	1	.....	.....	.....	.....	100	98	2	
1	1	.....	.....	.....	..	3	3	.....	98	97	1	
.....	... .	.....	.....	....	.....	8	8	. . .	99	97	2	
11	11	.....	2	2	.....	48	48	.....	1,054	1,033	21	

APPENDIX No. 21.

HARBOUR MASTERS.

TABLE showing the names of Ports proclaimed under certain Dominion Acts, the provisions of which are found in the Canada Shipping Act, chapter 113, Revised Statutes of Canada, 1906, for the appointment of harbour masters; the dates of proclamation; the names of the harbour masters appointed; the dates of the appointment of harbour masters; the amounts which each of their salaries is not to exceed; the amount of fees collected by each of them during the calendar year ended December 31, 1908, and the overplus, if any, paid to the credit of the Receiver General, for the year ended December 31, 1908.

PROVINCE OF ONTARIO.

Names of Port.	Harbour Masters.	Date of Appointment.	Amount Collected.	Remuneration Allowed.	Amount paid to Cr. R.G.
			$ cts	$ cts.	$ cts.
Amherstburg	M. Barrett	Dec. 29, 1906.	199 00	200 00	
Bronte	J. Wilson	Oct. 26, 1905.	4 50	200 00	
Byng Inlet	C. E. Begin	Mar. 24, 1908.	25 50	200 00	
Collingwood	F. Toner	Dec. 31, 1908.	158 00	300 00	
Depot Harbour	W. H Hoppins	April 15, 1907.	58 00	200 00	
Fort William	J. McAilister	May 12, 1906.	685 00	600 00	*84 75
French River	E. Barron		21 00	200 00	
Goderich	D. McKay	April 21, 1908.	60 00	300 00	
Little Current	J. F. May	July 19, 1906.	185 50	200 00	
Meaford	S. McClain	" 16, 1902.	30 00	200 00	
Midland	J. White	" 13, 1897.	137 00	300 00	
Oshawa	W. T. Henry	Aug. 10, 1904.	Nil.	300 00	
Parry Sound	B. Taylor	April 27, 1909.	47 00	200 00	
Penetanguishene	P. Light	May 7, 1906.	24 00	200 00	
Port Arthur	B. Guérard	" 21, 1897.	335 00	300 00	35 00
Port Stanley	F. F. Shephard	Jan. 15, 1898.		200 00	
Rondeau	W. R. Fellows	Dec. 17, 1888.	23 50	100 00	
Southampton	W. H. Johnston	Oct. —, 1882.	40 00	100 00	
"	Geo. McVittie, depy. h.m				
Sarnia	R. McAdam	May 3, 1886.	Nil.	300 00	

PROVINCE OF QUEBEC.

Amherst Harbour	J. Cassidy	Sept. 2, 1878.	11 50	200 00	
Bonaventure	A. Bourque	June 5, 1905.	9 00	100 00	
Cape Cove	J. Scott	July 15, 1908.	1 00	200 00	
Chicoutimi	A. Sturton	June 8, 1886	65 00	200 00	
Grand Entry	J. A. Chenell	Feb. 19. 1892.	1 50	200 00	
Grand River	G. Baudin	April 8, 1900.	18 00	100 00	
Gaspé	F. J. Eden	" 3, 1889.	62 50	500 00	
House Harbour	G. Lafrance	Dec. 10, 1896.	24 50	200 00	
Maria	A. Cyr	Mar. 29, 1905.	1 50	100 00	
Matane	L. J. Levasseur	Dec. 12, 1896	69 00	200 00	
Malbaie	P. Lawrence		17 00	200 00	
New Carlisle	J. Chisholm	April 22, 1902.	7 50	200 00	
New Richmond	F. X. Cormier	" 15, 1902.	25 00	200 00	
Nouvelle	J. Casey	Jan. 3, 1903.	22 00	200 00	
Oak Bay	T. Harper	July 12, 1904.	12 50	200 00	
Paspebiac	W. L. Kempffer	Sept. 21, 1900.	37 50	150 00	
Percé	E. Donohue	Oct. 10, 1903.	5 00	100 00	
Port Daniel	B. Langlois	Feb. 26, 1907.	7 00	200 00	
Rimouski	A. P. St. Laurent	May 13, 1896.	76 50	200 00	
Riv. du Loup	F. E. Gilbert	Oct. 5, 1902.	55 00	100 00	
St. Ths. Montmagny	L. Dionne	" 22, 1896.	24 00	200 00	
St. Johns	G. H. Farrar	Mar. 20, 1897.	718 00	600 00	118 00
Sorel	J. A. Proulx	June 6, 1901.	563 00	400 00	163 00
Tadousac	A. Gingras	" 6, 1906.	10 50	200 00	
Trois Pistoles	E. T. Petitgrew	April 11, 1899.	Nil.	150 00	

* For P.O.A., 25 cents.

SESSIONAL PAPER No. 21

TABLE showing names of ports, harbour masters, collections, salaries, &c.—*Continued.*

PROVINCE OF NEW BRUNSWICK.

Names of Port.	Harbour Masters.	Date of Appointment.	Amount Collected.	Remuneration Allowed.	Amount paid to Cr. R.G.
			$ cts.	$ cts.	$ cts.
Alma	G. W. Parson	Mar. 2, '98	16 50	100 00	
Bathurst	Capt. M. Daly	Apr. 15, '07	45 50	200 00	
Black's Harbour and Beaver Harbour	E. W. Cross	Sept. 17, '83	13 C0	100 00	
Buctouche	H. Hutchison	Apr. 17, '97	7 50	100 00	
Campbellton	G. E. Asker	May 5, '04	150 50	200 00	
Capobello	W. S. Sulis	Dec. 16, '92		100 00	
Cape Tormentine	M. S. Treene	May 13, '01	30 00	200 00	
Caraquet	J. A. Albert	Nov. 7, '05	8 00	150 00	
Chatham	R. J. Walls	Apr 13, '98	206 00	300 00	
Cocagne	T. Bourque	June 23, '05	50	100 00	
Dalhousie	W. S. Smith	Mar. 19, '88	88 00	200 00	
Dorchester	J. Shea	Oct. 25, '00	3 00	200 60	
Fairhaven	A. Calder	July 30, '01	13 00	200 00	
Grand Manan North	J. E. Caskell	Mar. 20, '07	10 00	100 00	
Grand Harbour	T. Ingalls	Apr. 19, '07	7 50	100 00	
Gull Rock Channel	G. A. Johnson	Apr. 27, '04		100 00	
Harvey	Wm. Wood	June 9, '03	32 00	100 00	
Heron Channel	D. Robertson	July 15, '97	22 50	200 00	
Hillsborough	J. O'Shaughnessy	Apr. 13, '98	35 00	150 00	
Hopewell Cape	J. H. Christopher	"	28 50	200 00	
Ledge of St. Stephens	Wm. McBean	June 12, '94		100 00	
Letete	H. W. Harris	Feb. 16, '06	6 50	100 00	
Moncton	T. Coffey	Apr. 12, '02	8 50	200 00	
Musquash	J. McNulty	Sept. 28, '96	4 50	100 00	
Newcastle	J. Russell	June 27, '04	120 50	300 00	
Port Elgin and Baie Verte	C. Trenholme	Apr. 3, '07	2 50	200 00	
Richibucto	J. Jardine	May 11, '74	23 00	200 00	
Sackville	E. Chase	May 11, '04	14 50	200 00	
St. Andrews	Capt. R. Keay	Feb. 16, '09	65 50	100 00	
St. George	G. W. McKenzie	May 10, '00	30 00	100 00	
St. Martin and Quaco	J. R. McDonough	July 11, '02	39 00	100 00	
Seal Cove	J. W. Wooster	Apr. 19, '07	3 00	100 00	
Shediac	A. McQueen	May 19, '76	20 00	300 00	
Shippegan	J. Degrace	Apr. 14, '03	8 50	100 00	
Tracadie	T. Savoy	Sept. 23, '99	6 00	100 00	
Waterside	W. C. Anderson	May 24, '01	8 00	100 00	
West Isles	B. Simpson	May 27, '01	14 00	200 00	
Whitehead	A. Cheney	Apr. 19, '07	6 00	100 00	

PROVINCE OF NOVA SCOTIA.

Abbot's Harbour	F. D. Entremont	May 23, 1901.	4 50	200 00	
Advocate	J. W. Knowlton	Feb. 11, 1908.	7 00	100 00	
Amherst	F. A. Gates	April 3, 1907.	21 00	360 00	
Annapolis	J. Lindgren	July 7, 1898.	76 50	200 00	
Arichat	J. Langlois	Mar. 22, 1909.	22 00	200 00	
Baddeck	P. L. McFarlane	May 6, 1909.	Nil.	100 00	
Barrington	B. Kenny	July 6, 1893.	30 50	200 00	
Bear River	W. McFadden	Sept. 27, 1897.	27 50	100 00	
Beaver Harbour	H. Hawbott	" 22, 1888.	1 00	100 00	
Big Harbour	D. G. McKenzie	April 18, 1908.	0 50	100 00	
Bridgewater	W. Oakes	Jan. 28, 1896.	130 00	100 00	39 00
Big Bras d'Or	J. McLean	Aug. 13, 1903.	4 00	200 00	
Cape Canso	G. Oliver	Feb. 14, 1905.	77 50	150 00	
Cape Negro	A. D. Parry	May 18, 1881.	10 00	200 00	
Chester	A. C. Corkum	July 8, 1896.	16 50	100 00	
Cheticamp	F. Aucoin	April 15, 1876	4 50	100 00	
Clark's Harbour	J. G. Nickerson		64 50	200 00	
Clementsport	J. M. LeCain	Oct. 18, 1898.	10 00	150 00	
D'Escousse	M. Martell	April 22, 1902.	9 50	100 00	
Digby	H. Anderson	June 19, 1902.	80 00	200 00	
Gaberus	J. W. Hardy	Nov. 2, 1886.	3 00	100 00	
Glasgow and Cape Breton Pier, Sydney	A. McQuarrie	Oct. 30, 1880.	33 00	300 00	

TABLE showing names of ports, harbour masters, collections, salaries, &c.—*Continued.*

PROVINCE OF NOVA SCOTIA—*Continued.*

Names of Port.	Harbour Masters.	Date of Appointment.	Amount Collected.	Remuneration Allowed.	Amount paid to Cr. R. G.
			$ cts.	$ cts.	$ cts.
Guysboro	A. M. Peart	Feb. 11, 1902.	2 00	100 00	
Halifax	J. E. Butler	Sept. 21, 1893.	1,523 00	1,800 00	
Hantsport	W. McCallock	Jan. 17, 1892.	186 50	300 00	
Ingonish So. Bay	J. Doucett	April 30, 1901.	9 00	100 00	
Ingram River	E. Huntly	Jan. 19, 1907	48 00	100 00	
Int. Pier, Sydney	M. J. Neville	Oct. 30, 1880.	421 50	300 00	121 50
Isaac's Harbour	T. D. Cook	June 19, 1900.	11 00	100 00	
Jeddore	E. Bakers	Dec. 3, 1903.	29 50	100 00	
Jordan Bay	F. Thorburn	May 11, 1901.	5 50	150 00	
Kelly Cove	J. Kenny	April 6, 1908.	0 50	100 00	
La Have or Getson's Cove	G. H. Zwicker	Feb. 26, 1875.	45 00	300 00	
L'Ardoise Upper and Lower	G. Burke	Aug. 29, 1884.	4 00	100 00	
Liscombe	L. Wilson	Feb. 20, 1900.	23 00	200 00	
Little Bras d'Or Lake, between McKay's Point and Grand Narrows	D. J. Campbell	April 17, 1899.	Nil.	100 00	
Little Glace Bay	E. Douglas	May 8, 1884.	14 00	200 00	
Little Narrows to Cranberry Point	K. McLennan	Nov. 1, 1897.	Nil.	100 00	
Liverpool	J. Ryan	Dec. 22, 1906.	162 50	200 00	
Lockeport	G. J. Locke	April 2, 1906.	Nil.	100 00	
Louisburg	H. C. Levate	Oct. 13, 1898.	333 00	200 00	
"	J. Townsend, D.H.M.	May 1, 1899.		150 00	
Lunenburg	J. Loye	Dec. 10, 1896.	122 50	150 00	
Ma'ou	J. McInnis	July 11, 1906.	7 00	100 00	
Mahone Bay	A. Hyson	Feb. 18, 1908.	24 50	200 00	
McNair's Cove	R. McEachern	Mar. 8, 1875.	Nil.	150 00	
Marble Mountain	D. McDonald	July 26, 1892.	5 00	200 00	
Margaretsville	J. McGranaghan	May 29, 1906.	3 00	100 00	
Margaret's Bay	H. C. Garrisson	Dec. 14, 1901.	3 50	100 00	
Margaree	M. A. Dunn	Mar. 6, 1909.	2 00	100 00	
Marie Joseph	C. Dixon	Feb. 2, 1907.	1 50	100 00	
Meteghan Hbr	J. McLair	Nov. 17, 1908.	2 50	100 00	
Meteghan River	L. A. Corneau	Resigned			
Musquodoboit	T. Williams	May 31, 1905.	5 50	100 00	
Neil's Harbour	R. Payne	July 15, 1905.	4 50	100 00	
Noel	S. O'Brien	Oct. 26, 1905.	4 50	200 00	
Northport	J. Davis	Dec. 21, 1902.	37 50	100 00	
Parrsboro	R.T. Smith	April 30, 1892.	164 50	300 00	
Petit de Grat	S. Boudrot	June 5, 1895.	12 00	200 00	
Petite Riviere Bridge	J. Nelson	April 27, 1888.	2 00	100 00	
Port Greville	J. Graham	April 27, 1909.	25 00	200 00	
Port Hastings	G. L. McLean	Feb. 15, 1908.	98 00	200 00	
Port Hood	J. H. Murphy	July 9, 1875.	2 50	200 00	
Port Latour	W. Sholds	Feb. 15, 1898.	18 50	200 00	
Port Lorne	F. Beardsley	June 9, 1896.	2 50	200 00	
Port Maitland	J. Ellis	Dec. 10, 1896.	5 50	200 00	
Port Morien	H. McDonald	Mar. 3, 1879.	29 50	400 00	
Port Mulgrave	J. A. McDonald	June 29, 1908.	6 00	200 00	
Port Medway	J. Hopkins	Feb. 13, 1903.	22 50	200 00	
Pubnico	D. Q. Amireau	Sept. 27, 1882.	44 00	100 00	
Port Wade	J. McWhinnie	Oct. 14, 1907.	17 50	200 00	
Pugwash	G. N. Allen	May 15, 1907.	30 50	100 00	
River Port	T. J. C. Creaser	Jan. 8, 1901.	34 00	100 00	
Riviere Bourgeoise	E. C. Bouchie	April 9, 1886.	7 50	100 00	
River Herbert	W. Y. Theal	July 24, 1903.	10 50	100 00	
St. Ann's Bay	G. E. Fader	Sept. 21, 1906.	8 00	200 00	
St. Ann's Hbr	A. McLeod	April 16, 1909.	24 00	200 00	
St. Mary's River	R. Quinn	June 21, 1909.	24 50	200 00	
St. Peter's	P. McNeil	Sept. 17, 1883.	79 00	200 00	
Sambro	B. Smith	May 27, 1890.	21 00	200 00	
Sheet Harbour	H. Hall	April 11, 1893.		200 00	
Shelburne	J. C. Morrisson	May 4, 1897.	192 00	200 00	
Ship Harbour	C. Marks	June 2, 1884.	20 50	100 00	
Spencer's Island	D. McLellan	May 23, 1899.	6 00	100 00	

SESSIONAL PAPER No. 21

TABLE showing names of ports, harbour masters, collections, salaries, &c.—*Continued.*

PROVINCE OF NOVA SCOTIA—*Concluded.*

Names of Port.	Harbour Masters.	Date of Appointment.	Amount Collected.	Remuneration Allowed.	Amount paid to Cr. R. G.
			$ cts.	$ cts.	$ cts.
Tangier	C. A. Hilchey	Nov. 14, 1901.	10 50	200 00	
Tatamagouche	W. Rielley	June 1, 1900.	1 00	200 00	
Tiverton	J. Blackford	April 3, 1900.	5 00	100 00	
Torbay	S. Fongere	Aug. 25, 1903.	14 50	200 00	
Tusket	C. Doucette	Nov. 21, 1902.	10 00	100 00	
Tusket Wedge	J. LeBlanc	May 16, 1901.	39 00	100 00	
Wallace	S. D. Potton	Feb. 14, 1896.	2 00	100 00	
Walton	B. McCulloch	Oct. 26, 1905.	24 50	200 00	
West Arichat	A. B. Poirier	Oct. 9, 1896.	13 50	100 00	
West Port	G. Welsh	Jan. 29, 1899.	33 00	200 00	
Weymouth	S. McCormack	May 29, 1897.	61 00	200 00	
Whycocomagh	N. McKinnon	Oct. 8, 1875.		100 00	
Wolfville	J. L. Franklin	Aug. 16, 1901.	13 00	100 00	
Woods Harbour	S. K. Woods	Feb. 19, 1892.	30 50	200 00	
Yarmouth	E. Scott	Oct. 19, 1877.	200 00	250 00	
PROVINCE OF PRINCE EDWARD ISLAND.					
Alberton	J. Kinch	July 30, 1901.	2 50	200 00	
Charlottetown and Hillsboro River	J. White	Mar. 6, 1909.	134 50	400 00	
Crapaud	W. Myers	June 17, 1874.	2 50	200 00	
Egmont Bay	G. Henry	Dec. 5, 1906.	1 50	200 00	
Georgetown	J. Westaway	May 16, 1904.	23 75	200 00	
Malpeque	J. Champion	Dec. 10, 1896.	1 00	200 00	
Minegash	P. Doucette	Jan. 21, 1908.	2 50	100 00	
Montague Bridge	H. McPherson	May 5, 1904.	9 50	200 00	
Murray Harbour	G. McLeod	Jan. 19, 1907.	3 50	200 00	
Murray River	G. McLeod	Feb. 9. 1897.	3 50	200 00	
New London	W. Bell	Aug. 25, 1896	4 00	200 00	
Pinette	J. D. McDonald	Oct. 22, 1903.	1 50	100 00	
Souris East and West	J. Tierney	May 15, 1905.	50 50	200 00	
Summerside	J. Matheson	Feb. 8, 1907.	30 50	200 00	
Vernon River Bridge	J. Finlay	Oct. 9, 1884.	0 50	200 00	
Wood Island	J. Young	May 22, 1899.	Nil.	100 00	
PROVINCE OF BRITISH COLUMBIA.					
Chemainus	L. G. Hill	Mar. 2, 1887.	70 50	200 00	
Comox	G. H. Rowe	April 25, 1896.	339 00	200 00	139 00
Ladysmith	W. Fraser	May 29, 1906.	201 00	200 00	1 00
Nanaimo Departure Bay	J. Knarston	Oct. 26, 1905	597 50	500 00	97 50
New Westminster	W. B. Shiles	Feb. 15, 1908.	116 50	400 00	
Snug Harbour	R. Kellahne	Mar. 2, 1903.	3 50	200 00	
Vancouver	D. A. McInnis	Jan. 22, 1909.	607 00	600 00	7 00
Victoria and Esquimault	C. E. Clarke	Nov. 3, 1894.	596 00	600 00	

RECAPITULATION.

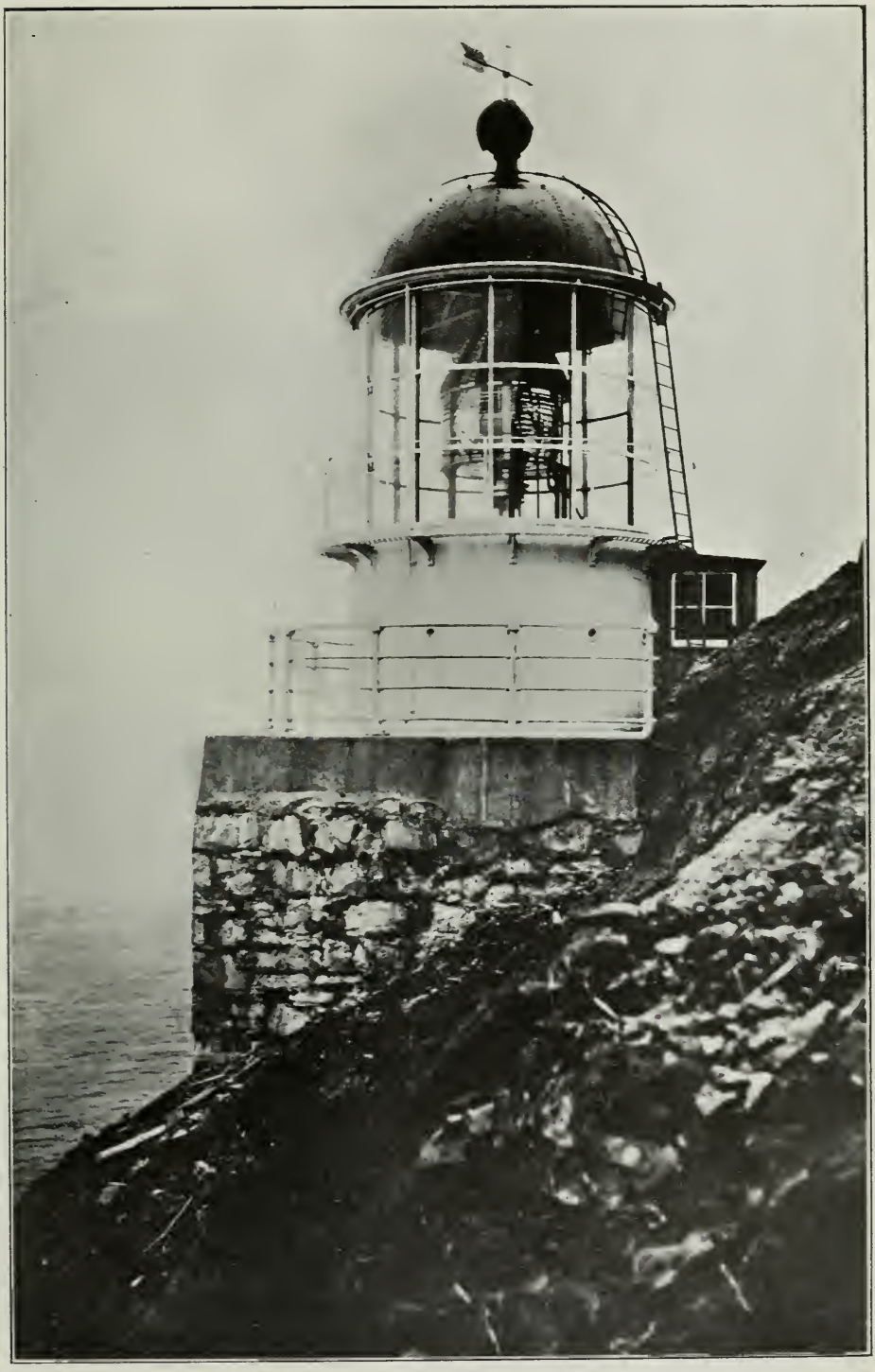
Province.	Number of Ports.	Amount Collected.	Amount paid to Cr. R. G.
		$ cts.	$ cts.
Ontario	18	2,037 00	120 75
Quebec	25	1,844 00	281 00
New Brunswick	38	1,097 00	
Nova Scotia, including Halifax	98	5,048 50	121 50
Prince Edward Island	16	271 75	
British Columbia	8	2,533 00	244 50
Total	203	12,831 25	767 75

GULF OF ST LAWRENCE
NEWFOUNDLAND
NEW BRUNSWICK
PRINCE EDWARD ISLAND
CAPE BRETON ISLAND
NOVA SCOTIA
MAINE
Magdalen Islands
Portland
MARINE and FISHERIES, CANADA
COMMISSIONER — LIGHTS BRANCH
Chart Showing
QUICK FLASHING LIGHTS
on the
Atlantic Coast of Canada

Cape Ray Lighthouse, Newfoundland.

North end of Belle Isle Light Station.

Reinforced Concrete Lighthouse at North end of Belle Isle.



Low Light on South End of Belle Isle.

Fishing Schooners moored in Black Joke Cove, Belle Isle.

Iceberg in Strait of Belle Isle.

Iceberg in Strait of Belle Isle.

Entry Island, Magdalen Islands, Lighthouse.

Cape Dogs, Que., Lighthouse.

Little Metis Station, Que., showing New Concrete Lighthouse Tower.

Ste. Anne de Beaupré, Quebec, Front Range Lighthouse.

St. Pancras Point Lighthouse, Quebec.

Government Shipyard, Sorel, machine shop and blacksmith shop.

Sawmill, Government Shipyard, Sorel.

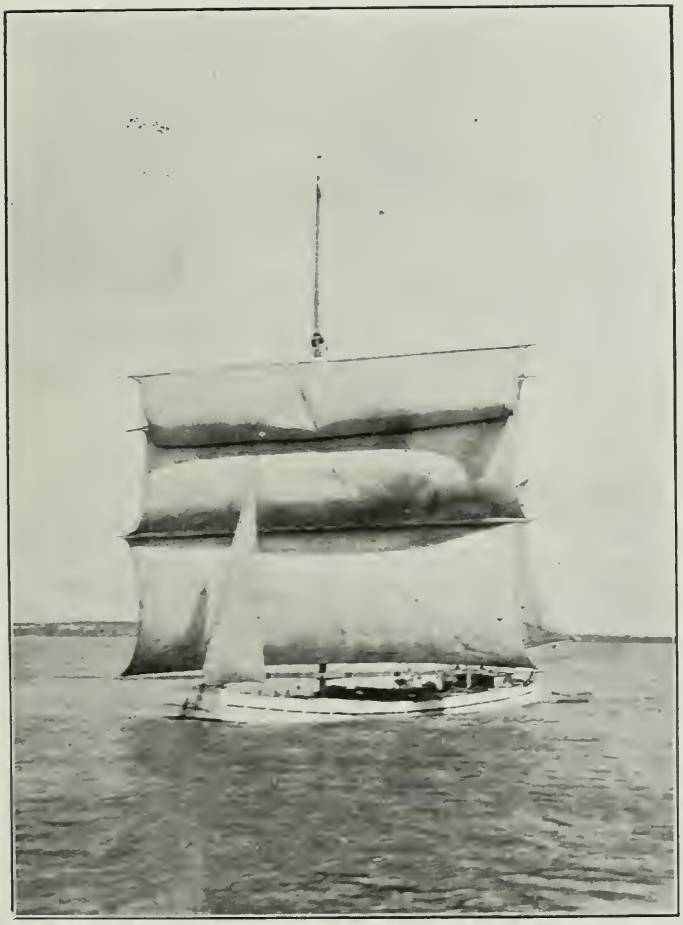
Interior of Sawmill, Sorel Government Shipyard.

Power House, Government Shipyard Sorel.

Interior of Power House, Government Shipyard, Sorel.

The new C. G. Steamer "Lambton" ready for launching at the Government Shipyard, Sorel.

C. G. Steamer ' Montmagny " under construction at Sorel Government Shipyard.



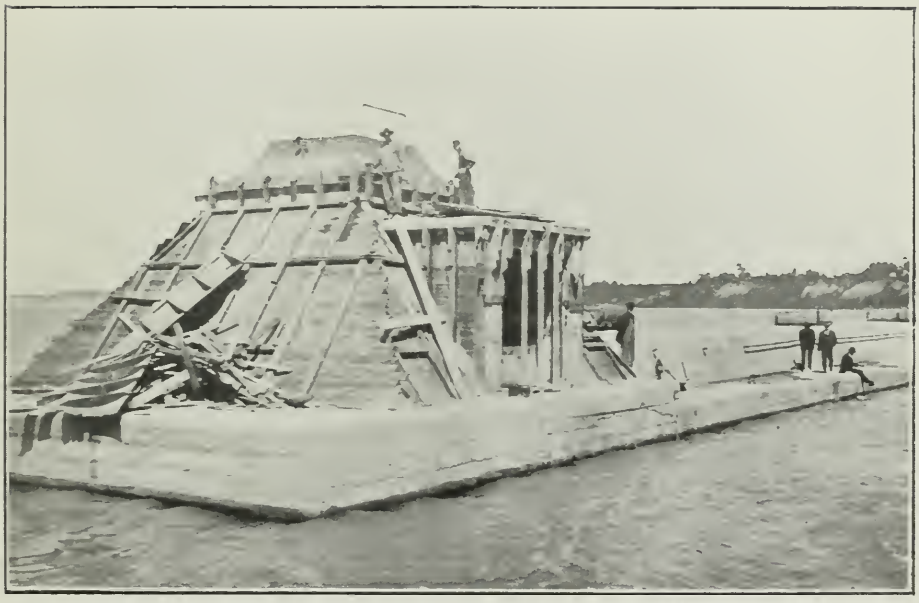
Pin Platte on Lake St. Peter, St. Lawrence River.

New Steamer "Lambton" for Lighthouse Construction on the Great Lakes.

New Steamer "Lambton" for Lighthouse Construction Service, Great Lakes.

New Steamer "Simcoe" employed in lighthouse supply and buoy service on the Great Lakes.

New Steamer "Simcoe" employed in Lighthouse Supply and Buoy Service on the Great Lakes.



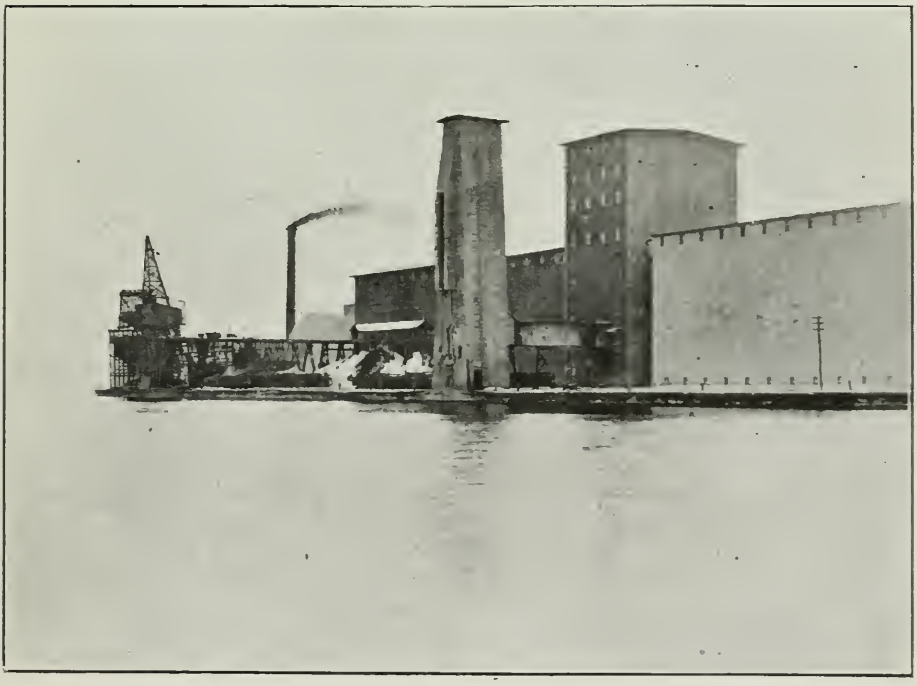
Port Stanley, Ont., Concrete Lighted Beacon under construction.

Colchester Reef, Ont., Lighthouse.

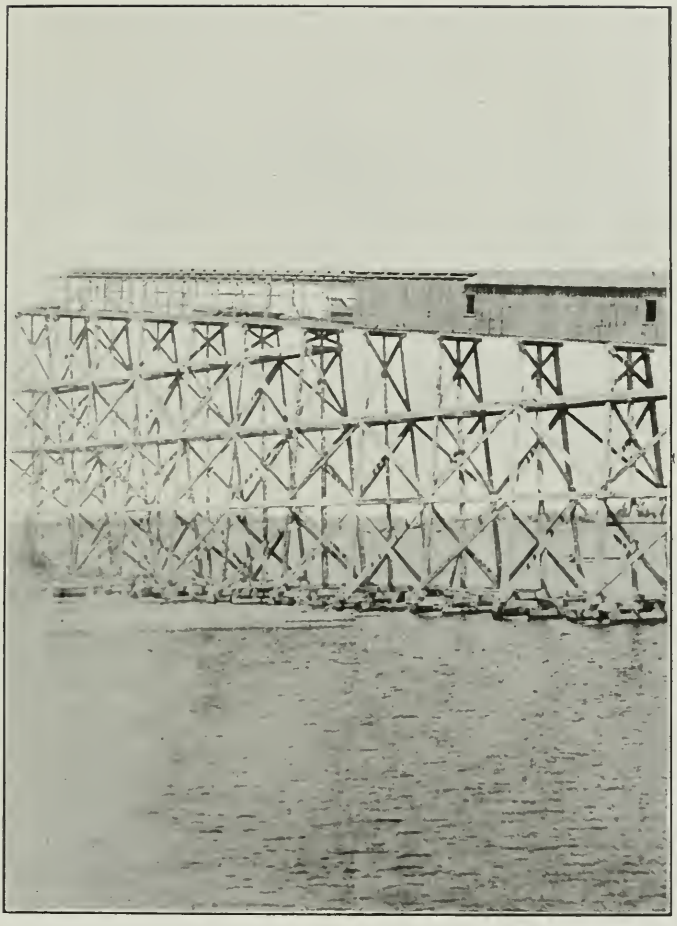
Owen Sound, Ont., Back Range Lighthouse.

Point Edward, Ont., Front Range Lighthouse under construction.

Stag Island Shoal Lighthouse, St. Clair River, Ont.

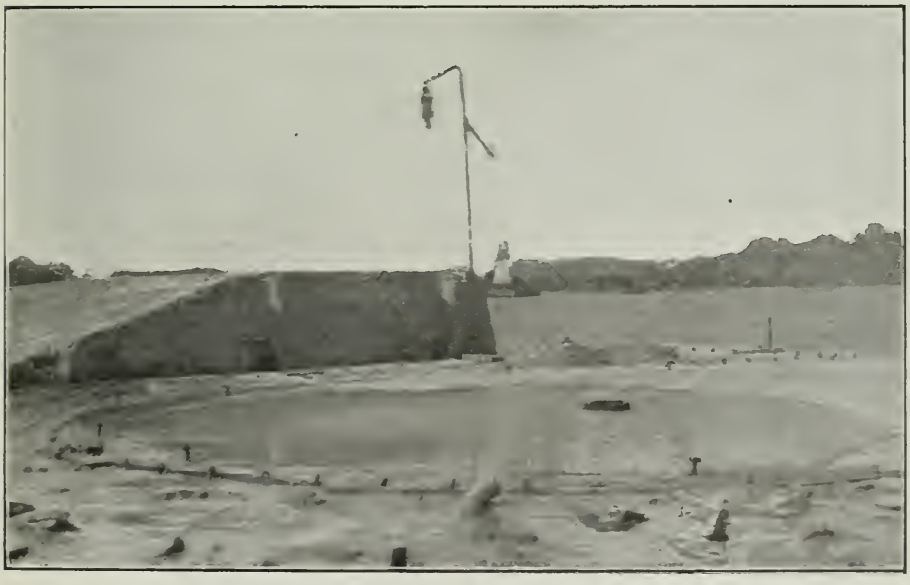


Grand Trunk Elevator, Depot Harbour, Ont.



Canadian Northern Railway, Iron Ore Trestle, Key Inlet, Georgian Bay.

Entrance to Port Stanley, Ont.



Port Stanley, Ont., site for Concrete Lighted Beacon.

Triangle Island, Cape Scott, B.C.

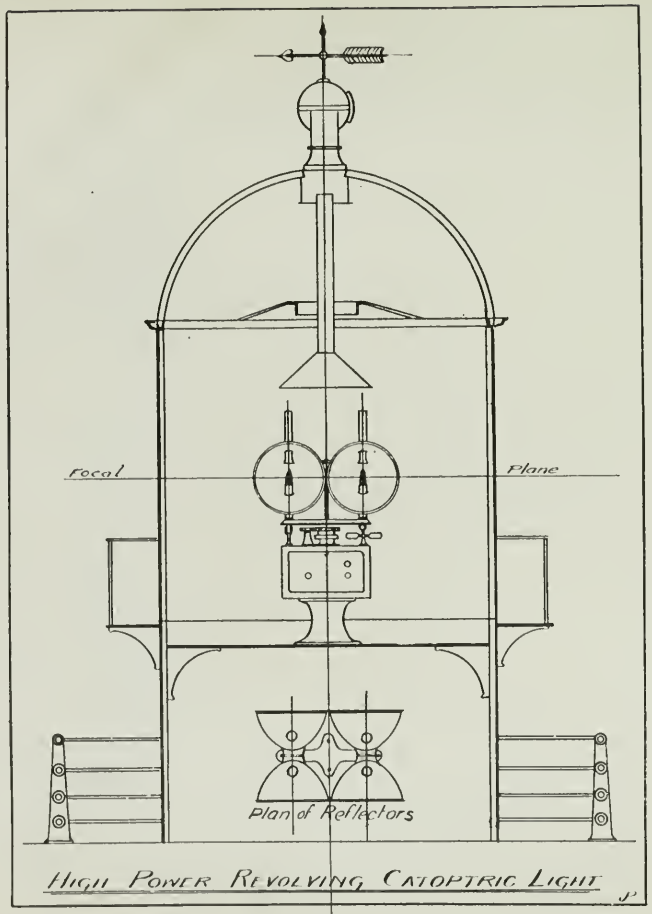


Plate 1.

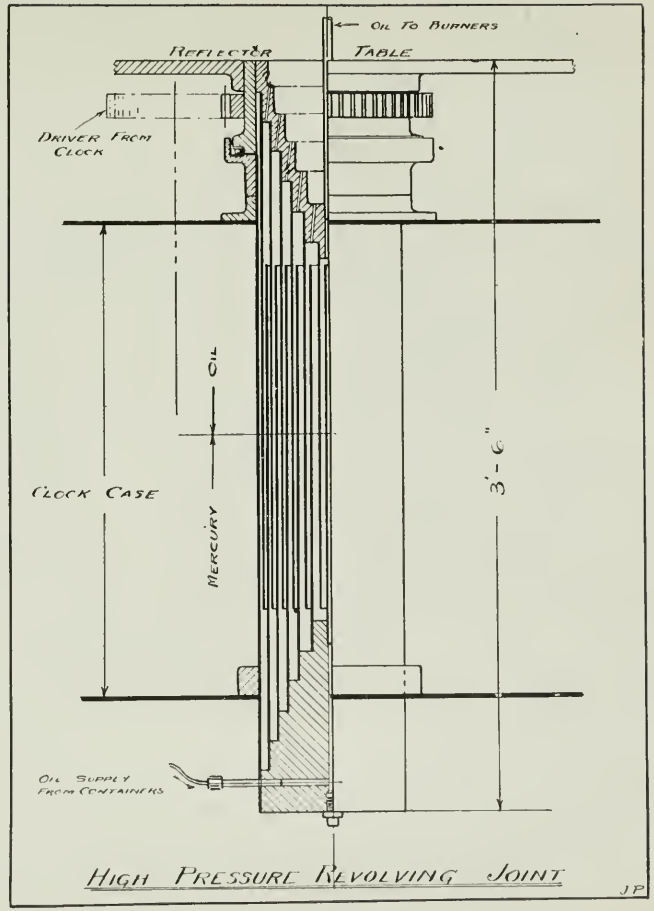
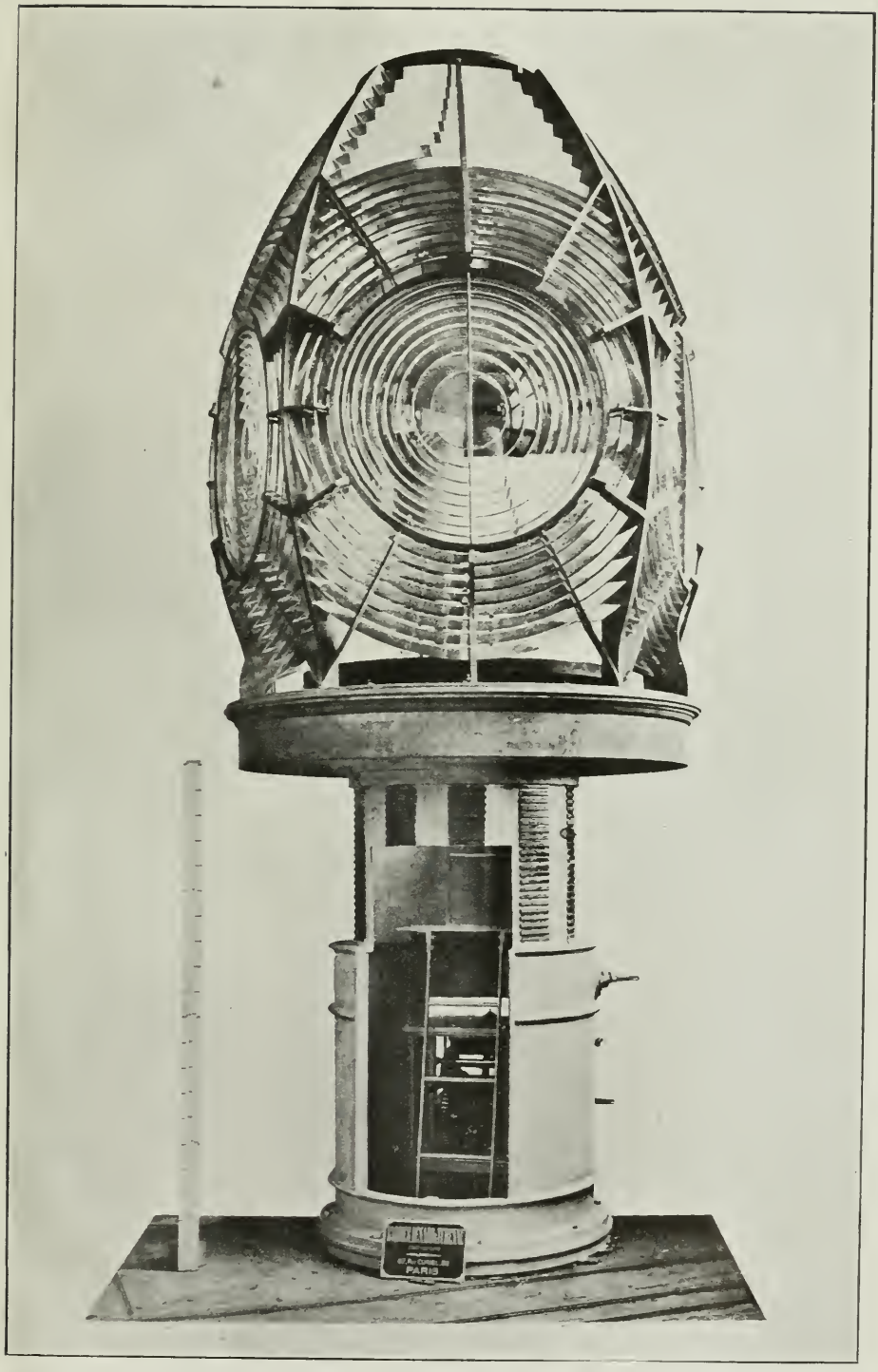
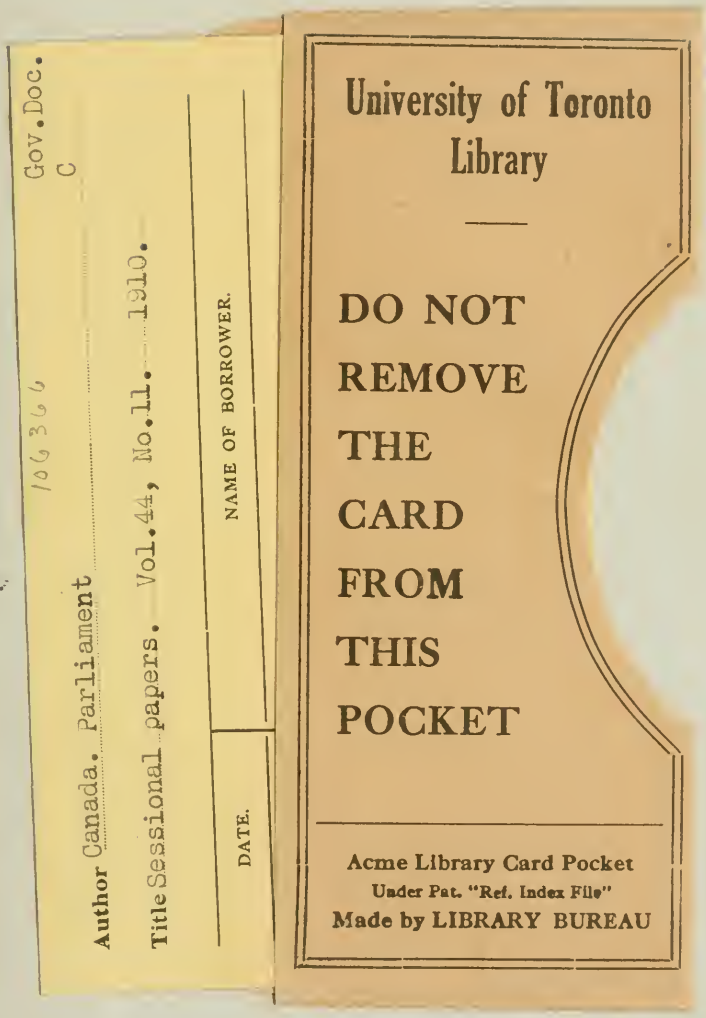


Plate 2.



First Order Lighting Apparatus, Cape Ray Lighthouse, Nfld., maintained by Dominion Government.

DR25/4/29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